

# **Exhibit B**



## **Expert Report**

Prepared by

**Thomas S. Terry, FSA**

June 29, 2015

In the matter of  
Robert Johnston, et al. v. Dow Employees Pension Plan

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The Dow plan administrator interpreted the plan by applying the provisions of plan Section 10.46 to calculate Mr. Johnston's pension benefit upon his retirement. As a consulting actuary, I would advise the Dow plan administrator that this interpretation is reasonable, and in fact is the only reasonable interpretation of the plan provisions. Further, the Dow plan administrator's calculations of Mr. Johnston's pension under Section 10.46 appear to be correct.	
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**Expert Report of Thomas S. Terry**

**In the matter of Robert Johnston, et al. v. Dow Employees Pension Plan**

**I. QUALIFICATIONS**

1. I am currently the Chief Executive Officer and founder of The Terry Group. I began my professional career at Towers Perrin in 1975. In 1991, I founded CCA Strategies LLC, which was acquired by J.P. Morgan in 2006. In 2010, I founded The Terry Group, which consults to organizations on pensions, employee benefits, and compensation.
2. In addition, I am active in the volunteer leadership of the actuarial profession in the United States and internationally. I am the immediate past president of the American Academy of Actuaries, the national association of actuaries practicing in the United States with responsibility for practice advancement, professionalism, and public policy. I also serve as chair of the Pensions and Employee Benefits Committee of the International Actuarial Association (IAA), and am the IAA's president-elect designee for 2016/2017.
3. I hold a Bachelor's Degree in Math and Physics from Tufts University and a Masters of Actuarial Science from the University of Michigan. A copy of my curriculum vitae, which details my employment history, publications I have authored, and selected presentations to regional and national gatherings, is attached hereto as Appendix A. Also attached as Appendix B is a list of matters in which I have submitted reports or testified as an expert in the last four years.
4. I have nearly forty years of experience consulting on the design, financing, and administration of employee pension plans. In my consulting, I am often asked to advise on the interpretation of plan provisions, evaluate and develop administrative processes, and help pension plan sponsors accurately and correctly calculate participants' pension benefits according to the terms of the plan.
5. I currently serve as chair of the Board of Actuaries, which has actuarial oversight responsibilities for the Civil Service Retirement System and the Federal Employees Retirement System. These systems combined cover over five million non-military federal employees and retirees.

**II. ASSIGNMENT**

6. I have been retained by Jenner & Block, representing Dow Chemical Company ("Dow"), to review the pension plan provisions and benefit calculations

performed for one of Dow's pension plan participants, Mr. Robert Johnston, to evaluate the reasonableness of the actions taken (or not taken) by Dow as the administrator of the plan, and to evaluate the reasonableness of the benefits paid to Mr. Johnston. In addition, I have been asked to perform similar analysis for other Dow pension plan participants who are part of a proposed class. As part of that evaluation, I have been asked also to review the expert report of Ian H. Altman, dated May 27, 2015,<sup>1</sup> and to comment on his opinions.

7. Dow sponsors a defined benefit pension plan for its employees, the Dow Employees' Pension Plan ("the Dow plan"). Relevant to this assignment, Dow entered into a joint venture with DuPont in 1996. This joint venture was called DuPont Dow Elastomers, LLC ("DDE"). The joint venture was ended in 2005. DDE also sponsored a defined benefit pension plan for its employees, the DuPont Dow Elastomers Pension and Retirement Plan ("the DDE plan"). Mr. Johnston participated in both the Dow plan and the DDE plan during his working career and so the transfer provisions of the Dow plan are a particular focus of this assignment.<sup>2</sup>
8. In my current consulting activities, I rely upon my own professional experience, professional actuarial standards of practice, and industry knowledge gleaned at professional conferences. In addition to my own professional experience and knowledge, I considered and/or relied upon the documents and reports listed in Appendix C to this report.
9. Except as otherwise indicated, all facts set forth in this report are based upon my review of relevant documents, my personal knowledge and experience, and my professional opinion. If called upon to testify, I would testify competently to the facts and opinions set forth in this report. I reserve the right to revise my opinions in light of any additional materials, including data, documents, and deposition or other testimony that may subsequently come to light, or if I am asked to perform further research or analysis.

### III. SUMMARY OF OPINIONS

10. **First Opinion:** The Dow plan administrator interpreted the plan by applying the provisions of plan Section 10.46 to calculate Mr. Johnston's pension benefit upon his retirement. As a consulting actuary, I would advise the Dow plan administrator that this interpretation is reasonable, and in fact is the only reasonable interpretation of the plan provisions. Further, the Dow plan administrator's calculations of Mr. Johnston's pension under Section 10.46 appear to be correct.

<sup>1</sup> Produced in this litigation and filed at Docket Number 26-3.

<sup>2</sup> Complaint, Docket Number 1, pp. 1-4.

11. **Second Opinion:** Section 10.46 of the Dow plan has the effect of a “make-whole” provision for Mr. Johnston and the other members of the proposed class. Specifically, because of Section 10.46, Mr. Johnston and the other proposed class members are assured that, for each of them, their total pension from DDE and Dow approximates the pension they would have received if they each had worked at Dow for all periods of service.
12. **Third Opinion:** Pensions calculated under Section 10.46 are larger than those calculated under Section 9.6 for Mr. Johnston and the other members of the proposed class.
13. **Fourth Opinion:** Assuming Section 9.6 did apply to Mr. Johnston’s pension benefit, the Dow plan administrator would have applied the Section 9.6 provisions by excluding the first period of Dow service from the numerator required in the calculation. As a consulting actuary, I would advise the Dow plan administrator that this application of Section 9.6 was reasonable and consistent with the terms of the plan.
  1. When Mr. Johnston transferred to DDE in 1996, Dow relinquished any responsibility for any pension benefit or credited service for benefit accrual purposes during his first period of Dow employment. This was and is fair, appropriate, and reflective of common practice when a Section 414(l) asset and benefit transfer occurs.
  2. Mr. Johnston’s return to Dow after his employment at DDE did not cause his pre-DDE Dow employment years to be re-established as credited service for benefit accrual purposes under the Dow pension plan. This was and is fair, appropriate, and reflective of common practice in situations where there is no pension transfer under Section 414(l).
  3. As a consulting actuary, I would advise the Dow plan administrator that it is reasonable and appropriate to exclude the period of first Dow service in the numerator of the proration factor when determining Mr. Johnston’s Dow pension under Section 9.6. Excluding such service is essential to adhere to the non-duplication provision of Section 4.10 and to avoid a windfall for Mr. Johnston.
14. **Fifth Opinion:** Mr. Altman’s calculations of pension benefit amounts and damages are wrong. Mr. Altman’s calculations are based on incorrect inputs and assumptions, and ignores important information about individual participants. Further, Mr. Altman’s calculations are unreliable because he has provided insufficient information to verify his calculations.



1. Mr. Altman used incorrect inputs and ignored important participant information.
  2. Mr. Altman ignored the amounts of benefits that certain participants are actually receiving under Section 10.46 when calculating damages.
  3. Mr. Altman's calculations cannot be verified because he has provided insufficient explanation.
15. **Sixth Opinion:** Each proposed class member's benefit is highly dependent on individual circumstances. When comparing benefits provided under the Section 10.46 offset calculation with the Section 9.6 "windfall proration" calculation, there is no consistent pattern of differences due to the wide variety of individual circumstances. Further, the Section 9.6 "windfall proration" calculation yields a lower benefit in many circumstances.
16. **Seventh Opinion:** Mr. Altman's opinions are based on errors and incorrect assumptions that render them incorrect.
1. Mr. Altman's first opinion, "The amendment implementing the provisions of Sec 10.46 without grandfathering prior benefits was an impermissible reduction in accrued benefit," is wrong.
  2. Mr. Altman Second Opinion, "Amendment implementing the provisions of Sec 10.46 reduced the future accrual rate of Class Members under the Plan," is wrong.
  3. Mr. Altman's Third Opinion, "Provision under Section 10.46 that approximates Average Annual Compensation was improperly applied," is wrong.
  4. Mr. Altman's Fourth Opinion, "The Plan was not amended at the time of the 1997 transfer to indicate that benefits transferred to the DDE plan would never be credited under the Dow plan." is irrelevant.
  5. Mr. Altman's Fifth Opinion, "DDE benefit accrual was minimal or non-existent in many cases," is wrong.
  6. Mr. Altman's Sixth Opinion, "Determination of damages," Mr. Altman's determination of damages," is flawed and unreliable.

#### IV. BACKGROUND

##### IV. A. The Dow Pension Plan

17. The Dow Employees' Pension Plan, established in 1947, covers nearly 50,000 participants, including nearly 17,000 active employees and 19,000 participants currently receiving pension payments. As of December 31, 2012, the plan had nearly \$8 billion in assets.<sup>3</sup>
18. The Dow plan is typical of what I call a large company pension plan in that it is carefully designed and managed in order to provide for the retirement income needs of tens of thousands of employees. Some would call such a plan "complex," but for those of us who regularly work with such companies and their pension plans, it is not out of the ordinary. Any complex organization the size of Dow will necessarily devote considerable attention to the varied needs of its workforce.

##### IV. B. Pension Plans in General

19. Under a typical defined benefit pension plan, a participating employee accrues a pension benefit over his service period with his employer. The pension benefit is then paid over his lifetime in retirement.
20. Under a typical defined benefit pension plan, the pension that will ultimately be paid to the employee at retirement is generally earned or accrued over time, increasing each year as pay increases and as additional years of service accrue. For example, a pension benefit commencing upon retirement at age 65 might be determined by multiplying an employee's years of service times a percentage of his final average pay.
21. To illustrate, assume a plan defines a pension as 1% of final average pay for each year of service, where final average pay is defined as the average of pay over the final three years of employment. Consider an employee who retires at age 65 with 30 years of service. His pay in his last three years of employment was \$97,000, \$101,000, and \$102,000, for an average of \$100,000. His pension, then, is calculated as  $1\% \times \$100,000 \times 30 = \$30,000$  per year, or \$2,500 per month, commencing at age 65.
22. While the actual pension benefit formulas under the Dow and DDE plans are more complex than this simple example, fundamentally they work the same way. That is, the benefit is affected by service and pay. The Dow pension plan

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<sup>3</sup> Dow Employees' Pension Plan 2012 Form 5500 (DOW0007455-7606).

calls this service “credited service” and the pay “average annual compensation.”<sup>4</sup>

23. Pension plans rarely rely merely on the span of time between an employee’s hire date and his date of employment for purposes of determining credited service. Accordingly, it is not uncommon for “credited service” as defined for purposes of computing an employee’s pension to differ from actual years of service an individual is employed with the company.
24. Credited service and other parameters affecting the calculations and amount of an individual’s pension are defined in a plan document. The plan document describes who is covered by the plan, how benefits are earned, how they are paid, how the plan is governed, and all other provisions of the plan.
25. The “plan administrator,” whose role is typically defined within the plan document, is a person or persons with a fiduciary responsibility to manage the plan for the exclusive benefit of plan participants. With respect to the Dow plan, for example, several senior managers, including the Global Director of Benefits, collectively take on the role of plan administrator.
26. The plan administrator’s role is key. The powers and responsibilities of the plan administrator include the exclusive authority and responsibility to interpret and manage the plan and resolve any ambiguities or inconsistencies. In the Dow plan document, these powers and responsibilities are spelled out in Section 7.1.
27. A plan administrator will often seek assistance in fulfilling his responsibilities by retaining outside expertise. For example, as is typical in my experience for a plan of its size, Dow retained a third-party recordkeeper, Towers Watson, to perform certain administrative functions, including the calculation of benefits.
28. Third-party recordkeepers calculate benefits in accordance with the plan document and specific guidance from the plan administrator.
29. In my experience, however, third-party recordkeepers for large plans *do not* assume responsibility as a fiduciary. In practice, this means that third-party recordkeepers do not have the authority to interpret the provisions of a plan. When a participant situation arises where a plan provision is not clear, the third-party recordkeeper will ask the plan administrator for direction.
30. The funding of a pension plan is an important means by which benefit security is achieved. The funds, or assets, of a pension plan are accumulated in a trust fund. The plan administrator, as a fiduciary of the plan, has the responsibility to

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<sup>4</sup> This report extensively cites and refers to provisions in the Dow plan. For ease of reference, relevant excerpts of the plan are attached at Appendix D.

invest and guard the assets in order to assure assets are used in the best interests of participants.

31. A plan administrator will also typically retain the services of a consulting actuary. A core actuarial function is the determination of plan liabilities and costs for accounting and funding purposes.
32. But, in addition, consulting actuaries such as myself have broader experience working with pension plans and employers who sponsor pension plans. So, it is typical that the actuary will be consulted on broader pension matters related to plan design, administration, compliance, etc.
33. The consulting actuary's role, whether it is the performance of the core actuarial function or the benefits consulting functions, is an advisory role, not a fiduciary role. Thus, while I may advise a plan administrator on the impact of a particular plan interpretation – perhaps from a funding, compliance, or consistency standpoint – I will stop short of interpreting the plan, as that is solely the responsibility of the plan administrator.

#### **IV. C. Employee Transfers in General**

34. Because employee transfers are central to many of the opinions set forth in this report, I will provide background on some of the important related pension implications. In my experience, strategizing about the design of pension plan provisions applicable to employee transfers requires a good deal of care and attention to detail, adherence to over-arching company goals and objectives, as well as appropriate vigilance to avoid adverse unintended consequences.

##### **IV. C. 1. What is an employee transfer?**

35. It is not uncommon for employees in a large company to transfer from job to job, from division to division, or from subsidiary to subsidiary in the course of a career.
36. An employee transfer may also occasionally occur from the employing company to or from an affiliated company, such as a joint venture company.

##### **IV. C. 2. What happens to pension coverage when an employee transfers?**

37. Some companies sponsor one large, single pension plan. In such instances, employee transfers within that company have no effect on pension coverage.

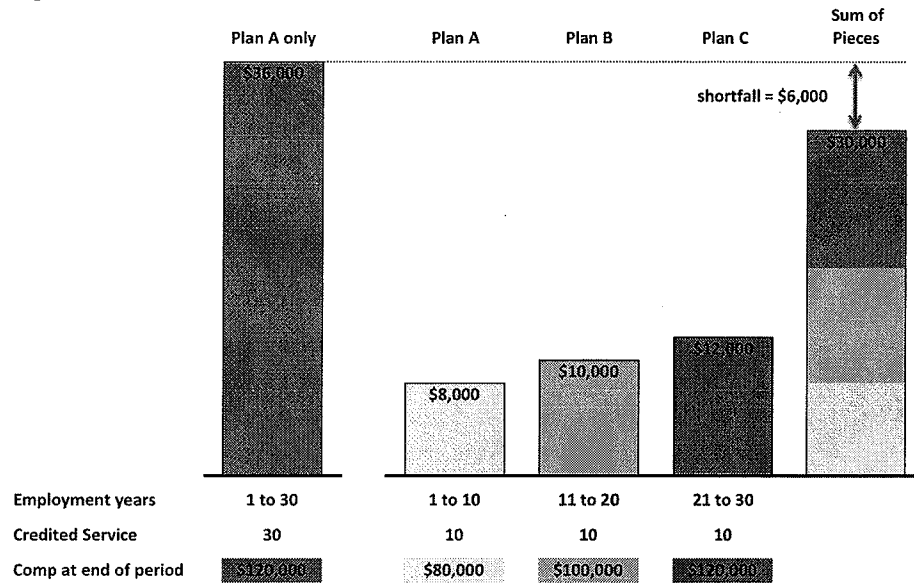
Continuity of pension coverage facilitates relatively easy determinations of credited service, compensation, and other relevant inputs into pension determinations.

38. Other companies sponsor more than one plan – perhaps even several. Reasons may be historical and may be attributable to prior company acquisitions or just different competitive pension practices for different lines of business.
39. In my experience, it is common for very large companies such as Dow to sponsor several different pension plans or to be involved with various different affiliated business ventures, each with their own pension plan. Management of such companies, in seeking to move personnel talent to where it is most needed, will often initiate employment transfers that involve employees moving in and out of different pension plans over the course of a single career.
40. In my experience, such companies will spell out within each of the plans exactly how pensions will be calculated for employees who transfer from one plan to another. These special transfer provisions typically seek to directly address the special issues that may arise for any given transfer.

#### **IV. C. 3. What pension issues arise when an employee transfers?**

41. To begin with, each pension plan will typically define who is eligible for coverage under the plan. A plan's eligibility section will be the first place to look for this information, and it is the starting point for any transferring employee to determine what pension coverage he or she may have.
42. The general plan provisions, along with any specific transfer provisions, need to specify the relevant details necessary to calculate a pension. These details include specifying relevant service and compensation. Such provisions will also need to address issues related to coordination with any other plan the employee participated in.
43. There is a key issue that, left unaddressed by special transfer provisions, might result in the transferred employee receiving a smaller pension than employees who do not transfer during the course of their careers. The issue stems from defining an employee's total company pension as the simple sum of the pensions earned from sequential plan participation. Consider the example in Figure 1:

Figure 1



44. In Figure 1, above, a hypothetical company has three pension plans, Plans A, B and C. Their pension formulas are identical and define the pension as 1% of final compensation times years of service.
45. The first column represents the pension of an employee who works a 30-year career and participates in Plan A for the entire 30 years.
46. The remaining columns represent the pension of another employee who works 10 years in a job covered by Plan A, transfers to a job covered by Plan B and works there for 10 years, and then transfers again to a new job, this time to a job covered by Plan C for the final 10 years of his career.
47. The employee who transferred twice, even though there are identical pension formulas in each plan, suffers a shortfall relative to the employee who works continuously in a job covered by a single pension plan. This is because the pieces of the pension earned in each employment segment were determined as stand-alone pensions that were determined at the end of each employment segment. Thus, they were based on the compensation determined as of those points in time.

#### IV. C. 4. Why do companies build in special pension transfer provisions?

48. In my experience, companies do not want pension concerns to stand in the way of an individual accepting an employment transfer to a new job that involves being covered by a different pension plan. The pension shortfall suffered by the

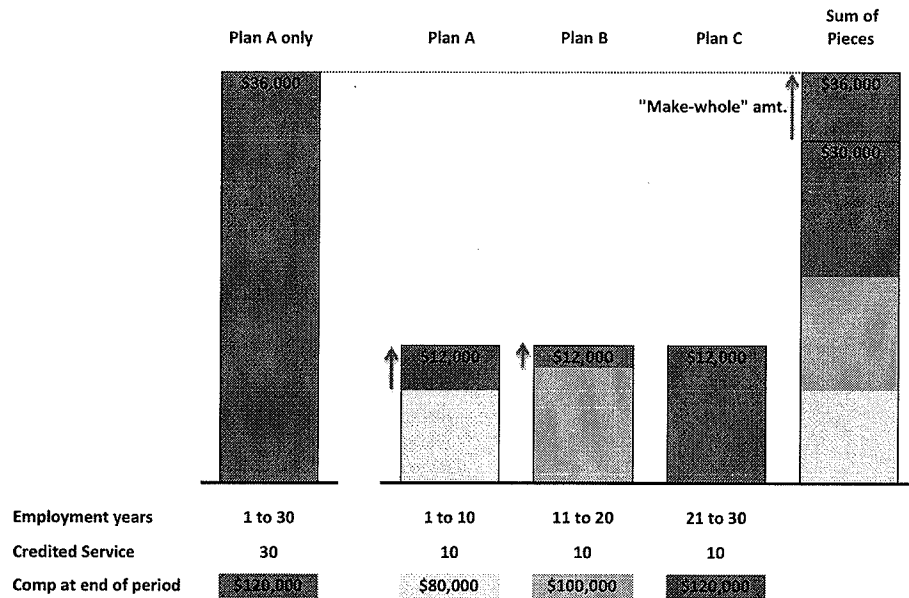
transferring employee in the example above is the sort of adverse transfer result that companies will typically seek to address by including special transfer provisions in pension plans. Thus, special transfer provisions seek to prevent such unfair shortfalls.

49. Similarly, companies do not want to encourage “gaming” or taking advantage of an employment transfer that might provide an inadvertent windfall because of the interaction of two different pension plans where, as an example, service is “double-counted,” that is, the same service is counted twice for benefit accrual purposes.

#### **IV. C. 5. What do special transfer provisions attempt to accomplish?**

50. In my experience, employers use special transfer provisions in pension plans to avoid unfair pension losses and unfair pension windfalls attributable to employment transfers.
51. Building on the example above, the pension shortfall of \$6,000 per year could be reduced or eliminated by special transfer provisions. Referring to Figure 2, each of the pieces of pension could be grossed up to reflect the “final-final” compensation of \$120,000. In that scenario, each of the pension pieces would be \$12,000, totaling \$36,000. Alternatively, a “make-whole” provision could be inserted into any one of the plans so that the shortfall is covered by an additional pension calculated by taking the hypothetical “whole career” target pension amount and subtracting off actual amounts paid in the various pieces – the net to be paid out as part of the “make-whole” provision.

Figure 2



52. Returning to the possibility of double-counting of pension service mentioned above, a special transfer provision and/or a non-duplication provision would seek to prevent such a windfall.

#### IV. C. 6. Example of dealing with "there and back again" transfers

53. I have developed a more detailed example of a two-plan situation that is similar to that faced by Mr. Johnston in this case. I have scaled the service years to more closely resemble Mr. Johnston's service. However, I am again using the simplified pension formula from above (1% of compensation times years of service). The simplifications are designed to allow a straightforward presentation of key concepts.
54. Suppose an employee works in a job covered by Plan A for 15 years, transfers to a job covered by Plan B for 10 years and then returns to a job covered by Plan A again for his last 5 years. Assume his final compensation amounts at the end of the three periods of employment are \$80,000, \$100,000, and \$120,000. Using the 1% of final compensation pension formula, his annual pension benefits for his three periods of service would be:

First period (Plan A service)	$1\% \times \$80,000 \times 15 = \$12,000$
Second period (Plan B service)	$1\% \times \$100,000 \times 10 = \$10,000$
Third period (Plan A service)	$1\% \times \$120,000 \times 5 = \$6,000$



55. A full-career Plan A employee would have an annual pension of:

Full career in Plan A	$1\% \times \$120,000 \times 30 = \$36,000$
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56. If the three periods of service are treated separately, the total pension for his three periods of service would be  $\$12,000 + \$10,000 + \$6,000 = \$28,000$  (\$18,000 from Plan A and \$10,000 from Plan B), significantly lower than the benefit of a full-career Plan A employee whose pension would be \$36,000. The pension shortfall is \$8,000 per year.
57. If Plan A were designed to make up some or all of the shortfall, then there are several ways to accomplish this. I will describe two here – both of them relevant to Mr. Johnston’s situation at Dow.
58. Under one approach, assume Plan A has a “make-whole” provision. Plan A would calculate a hypothetical “whole-career” pension of \$36,000 and then subtract the actual Plan B pension to get a new Plan A pension of \$26,000 ( $= \$36,000 - \$10,000$ ). As I will describe later on in this report, this is essentially what the section 10.46 offset calculation applicable to Mr. Johnston does.
59. Under another approach, assume Plan A has a “proration” provision. Plan A would again start with the calculation of a hypothetical whole-career pension of \$36,000. But this time, the hypothetical whole-career pension is multiplied by a proration factor of total Plan A service divided by all service ( $= 20/30$ ). This results in a new Plan A pension of \$24,000 ( $= \$36,000 \times 20/30$ ).
60. This proration calculation provides a better pension than treating each period of service separately, but still falls short of the amount of the “make-whole” calculation. The three calculation approaches are summarized below.

	Plan A	Plan B	Total
Treating each periods separately	\$18,000	\$10,000	\$28,000
Proration based on Plan A service	\$24,000	\$10,000	\$34,000
“Make-whole” calculation	\$26,000	\$10,000	\$36,000

61. Consider another situation. Consider if Plan B were written to take responsibility for the first two periods of employment (the first Plan A period of service, plus the Plan B period of service) and pay a pension of \$22,000 ( $= \$12,000 + \$10,000$ ). Turning to Plan A, and using the proration methodology, the numerator of the fraction would include only the second period of Plan A employment in order to avoid a duplication of benefits (assuming Plan A included a non-duplication provision). Otherwise the total pension benefits

received would be  $\$22,000 + \$24,000 = \$46,000$ , resulting in a windfall of \$10,000.

62. This simplified example is meant to illustrate the pension benefits of transferring employees similar to Mr. Johnston. Generally speaking, unless the company intends to make a conscious decision to pay a windfall, a “make-whole” provision (of the type described in Section 10.46, as I’ll describe later in this report) is the most generous approach.

#### **IV. D. Special Case: Pension Transfers Under a 414(l) Asset and Benefit Transfer**

63. A basic tenet of pension plans is that a plan generally cannot relinquish responsibility for paying a pension. An important exception to this basic tenet is when employees transfer from one plan to another and the associated pension obligations transfer as well under what’s called a Section 414(l) asset and benefit transfer. “Section 414(l)” refers to the enabling section of the Internal Revenue Code that permits such transfers while also providing full protection to the participants.
64. A 414(l) asset and benefit transfer is used when a company intends to fully and completely transfer a pension obligation from one plan to another. In my experience, 414(l) asset and benefit transfers are used by plan sponsors to simplify and consolidate benefits into a single plan in a manner that keeps all parties “whole.”
65. For example, if an employee transfers from Plan A to Plan B, the full obligation for his pension passes from Plan A to Plan B along with appropriately determined plan assets to pay for that obligation. The result of such a 414(l) asset and benefit transfer is that the participant is eligible for a single, full “A+B” service pension from Plan B, and nothing from Plan A.
66. Absent a 414(l) asset and benefit transfer, the pension obligation and the related assets remain with Plan A. Thus, after an employment transfer that is *not* accompanied by a 414(l) asset and benefit transfer, the participant is eligible for two separate pension benefits – one from Plan A and one from Plan B.

#### **IV. E. Dow’s Pension Transfer Provisions as They Apply to Mr. Johnston**

##### **IV. E. 1. Definitions**

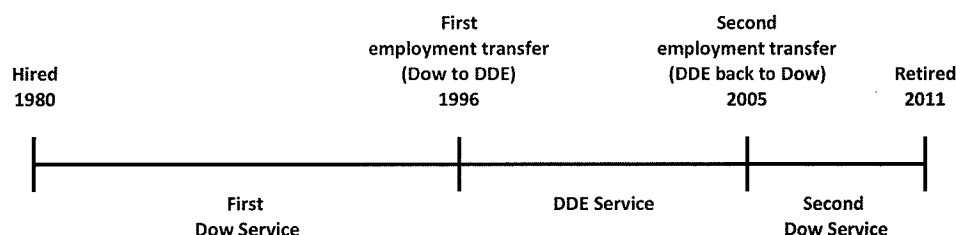
67. Mr. Johnston’s employment with Dow began in 1980 and he retired from Dow in 2011. However, during his career, he transferred to DDE (in 1996) and then

back again to Dow (in 2005).<sup>5</sup> For purposes of this report, I will refer to these two transfers as his “first transfer (Dow to DDE)” and his “second transfer (DDE back to Dow).”

68. Also, for purposes of this report, I will refer to Mr. Johnston’s three relevant periods of employment as follows:
- “First Dow service” – his employment with Dow from 1980 to 1996.
  - “DDE service” – his employment with DDE from 1996 to 2005.
  - “Second Dow service” – his employment with Dow from 2005 until retirement in 2011.

69. Figure 3 provides a visual depiction of the relevant periods of Mr. Johnston’s employment.

Figure 3:



#### **IV. E. 2. Mr. Johnston’s First Employment Transfer (Dow to DDE) was accompanied By a 414(I) Asset and Benefit Transfer**

70. Mr. Johnston’s first employment transfer (Dow to DDE) was accompanied by a 414(I) asset and benefit transfer. As a result, his credited service, the accrued benefit under the Dow pension plan for the period of first Dow service, and related plan assets were transferred to the DDE pension plan.<sup>6</sup>
71. The DDE pension plan provided Mr. Johnston with a pension formula that fully incorporated the pension and related credited service he earned while at Dow during his first Dow service.<sup>7</sup>

<sup>5</sup> Docket Number 1, pp. 3-4.

<sup>6</sup> Human Resources Matters (DOW0001060-1070, at 1065-66); Asset Transfer Letter from Mary Stone to Janet VanAlsten (DOW0001078-1099, at 1078-80, 1099); Dow Letter from J. VanAlsten (DOW0001131-1133); Watson Wyatt Letter to DuPont with Asset Transfer (DOW0020538-556, at 20538-40, 20546); Dow Letter to Johnston (DOW0004534); December 27, 2012 Appeal Denial (DOW0012894-0940, at pp. 1-2).

<sup>7</sup> Dow Letter to Johnston (DOW0001715-716); December 27, 2012 Appeal Denial (DOW0012894-940, at p. 17); DDE Benefits Summary (P001659-1673, at 1660-62); Memo re: DDE Benefits (P004362-391, at 4378-384); DuPont Letter to Johnston (DOW0004534).

72. Had Mr. Johnston terminated employment or retired from DDE, without returning to Dow, he would have been entitled to a DDE pension that reflected credited service for both his period of first Dow service and his DDE service. In addition, and very importantly, Mr. Johnston would not have been entitled to any Dow pension. This is because the 414(l) asset and benefit transfer shifted Mr. Johnston's full entitlement to benefits and credited service to the DDE pension plan.<sup>8</sup>

**IV. E. 3. Mr. Johnston's Second Employment Transfer (DDE back to Dow) Was NOT Accompanied By a 414(l) Asset and Benefit Transfer**

73. Mr. Johnston's second transfer (DDE back to Dow) was very different from the first transfer. It was not a 414(l) asset and benefit transfer. So, unlike his first transfer (Dow to DDE), accrued pensions and credited service were not transferred back to Dow. And there was no transfer of pension assets.<sup>9</sup>
74. As a result, after the second transfer, the DDE plan still effectively retained responsibility for pension benefits and credited service for both the period of first Dow service plus DDE service.
75. The calculation of Mr. Johnston's Dow pension following the second transfer (DDE back to Dow) requires an understanding of a number of relevant sections of the Dow pension plan, including 4.1, 4.10, 9.6, and 10.46. Each of these plan document sections is discussed further below.

**IV. E. 4. Dow Pension Plan Section 4.10, "Duplication of Benefits"**

76. Section 4.10 is an overriding non-duplication provision that effectively says there shall be no double-counting of credited service. This section is designed to prevent any inadvertent windfall that may arise in the application of any other section of the plan document.

There shall be no duplication of benefits payable under this Plan and under any other private qualified retirement plan to which the Company or any Subsidiary or affiliated corporation contributes or has contributed except the 401(k) Plan. If a Participant, Spouse or other Beneficiary, if any, shall be eligible for a benefit under any such plan other than those excepted in the preceding sentence and shall also be eligible for a benefit

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<sup>8</sup> Dow Letter to Johnston (DOW0004534); December 27, 2012 Appeal Denial (DOW0012894-940, at p. 17); Dow Letter to Johnston (DOW0001715-716); DDE Benefits Summary (P001659-673, at 1660-62); Memo re: DDE Benefits (P004362-391, at 4378-84).

<sup>9</sup> Dow Presentation (P004409-452, at 4426-27); Presentation from Watson Wyatt (DOW0013628-13650, at 13634, 13638, 13640); December 27, 2012 Appeal Denial (DOW0012894-940, at p. 17).

hereunder based upon the same period of service by the Participant, then the amount of such other benefit received (or the Actuarial Equivalent thereof where necessary or appropriate) shall be deducted from the benefit payable hereunder for such same period of service.

77. In my experience, U.S. employers take seriously the tax-qualified status of their pension plans under the U.S. tax code. As a result, when designing pension plans, they seek to achieve a “level playing field” for all plan participants. That is, they design their plans to be fair to all covered employees and provide consistent pensions for all. Providing windfalls for special subsets of employees can put a plan’s important tax-qualified status in jeopardy and is something that is carefully avoided.
78. Thus, the Dow plan explicitly provides that windfalls stemming from duplication of benefits are prohibited.
79. A duplication of benefits provision is a common feature of pension plans that helps achieve the goals of providing fair and balanced benefits to participants and protecting the tax-qualified status of the plan. I have seen non-duplication of benefits provisions in most, if not all, pension plans with which I’ve worked.
80. In my experience, a provision such as Section 4.10, Duplication of Benefits, provides extremely helpful guidance to a plan administrator faced with the challenge of properly applying other plan provisions in a complex situation.

#### **IV. E. 5. Dow Pension Plan Section 9.6, “Transfers of Employees”**

81. Section 9.6, which was effective at the time of Mr. Johnston’s second transfer from (DDE back to Dow), describes a methodology for calculating a Dow pension for employees who have returned to Dow after working for a Dow affiliate, and earned benefits under another plan. As I read the plan, the methodology requires the calculation of a hypothetical whole-career pension based on all periods of employment (all Dow service plus all DDE service), multiplied by a proration factor. I will generally describe the proration factor as relevant Dow credited service divided by all Dow and DDE service.
82. For Mr. Johnston, the plan administrator determined the relevant Dow credited service to be included in the numerator of the proration factor to be the period of second Dow service. The use of this proration factor appears to achieve two goals: first, to recognize the impact of the 414(l) asset and benefit transfer, and second, to avoid giving a windfall to Mr. Johnston. This determination to use the period of second Dow service in the numerator is supported by two consistent facts:

- a. Mr. Johnston's credited service for benefit accrual purposes for his first period of Dow service was effectively fully transferred to DDE at the time of the first employment transfer which was accompanied by a 414(l) asset and benefit transfer. No subsequent 414(l) asset and benefit transfer back to the Dow plan happened subsequent to that first transfer. Thus, the credited service for benefit accrual purposes that was associated with the first transfer (Dow to DDE) remained with DDE.<sup>10</sup>
- b. Plan Section 4.10, "Duplication of Benefits," precludes a situation where benefits would be paid twice based on the same period of service. So, effectively, because the DDE pension is based on the period of first Dow service, that same service should not be used again to grant yet another benefit for that same period of service.

**IV. E. 6. Dow Pension Plan Section 10.46, "Transfers from DuPont Dow Elastomers Pension and Retirement Plan"**

83. Section 10.46 was added to the plan following Mr. Johnston's second transfer (DDE back to Dow) and replaces Section 9.6 specifically for DDE employees transferring back to Dow.
84. Like the calculation under Section 9.6, the Section 10.46 calculation starts with a hypothetical whole-career pension based on all periods of employment (all Dow service plus all DDE service). But rather than multiplying by a proration factor, under Section 10.46 the estimated DDE pension is subtracted from a hypothetical whole-career Dow pension based on all periods of Dow and DDE employment. Thus, Mr. Johnston's Dow pension, when added to his DDE pension, results in a pension that is approximately the same as the pension he would have been entitled to from Dow had he never transferred to DDE and instead worked his full career at Dow.
85. Both Section 9.6 and Section 10.46 have similar effects. They both seek to assure that employees involved in transfers receive fair and reasonable pensions. Both sections appear to have been designed to assure there is no disincentive or penalty for transferring employment. Neither section appears to be designed to provide windfalls to employees.
86. Mr. Johnston's pension was part of the Dow-to-DDE 414(l) asset and benefit transfer.<sup>11</sup> Accordingly, Section 10.46 provides explicit recognition of that in the calculation method it prescribes for Mr. Johnston's Dow pension: the Dow pension is based on a hypothetical whole-service pension amount, which is then

<sup>10</sup> Employee Benefits and Other Dow Programs (P004409-52, at 4426-27).

<sup>11</sup> See supra Paragraph 72.

offset by the estimated DDE pension. The estimated DDE pension includes the pension that was effectively transferred from Dow to DDE when the 414(l) asset and benefit transfer occurred. See Section 10.46(c)(i). Thus, the calculation complies with the Dow plan's non-duplication requirement in Section 4.10 in that service is not double counted.

#### IV. E. 7. Dow Pension Plan Section 4.1, "Normal Retirement Benefit"

87. The applicable Dow pension formula relevant to Mr. Johnston upon his return to Dow in 2005 is described in the plan Section 4.1 as the greater of the Grandfathered Formula Benefit and the Current Formula Benefit. The Current Formula Benefit is the ongoing, primary pension formula for the Dow plan, while the Grandfathered Formula Benefit is so named because it was formerly Dow's primary pension formula.
88. It is not uncommon for a pension plan to transition from one formula to another by running both formulas side by side for a period of years as a transition. Such was the case for Dow.
89. It was January 1, 1996 when the Dow plan was amended to introduce this two formula concept.<sup>12</sup> At that time, it was intended that the Grandfathered Formula Benefit would continue to apply fully for another ten years, until December 31, 2005, at which time it would be "frozen" and its effect would begin to phase out.<sup>13</sup> In my experience, a ten-year transition period is generous, but certainly not unheard of, for a company wishing to transition from one pension formula to another.
90. The Grandfathered Formula Benefit is described in Section 4.1(b)(i)(A).  
Excerpting relevant parts here:
 

1.6% of the Employee's Average Annual Compensation (not in excess of such Employee's Average Annual Compensation as of December 31, 2005) multiplied by the Employee's years of Credited Service ... not in excess of ... such Employee's Credit Service as of December 31, 2005 ...
91. Effectively, the December 31, 2005 "freeze" of the Grandfathered Formula Benefit was accomplished by stopping any further recognition of pay or service as of that same date – December 31, 2005.
92. So, when Mr. Johnston's employment was transferred from DDE back to Dow effective June 30, 2005, he rejoined a pension plan that, as of that date, had an

<sup>12</sup> See Dow Employees' Pension Plan Section 4.1.

<sup>13</sup> See also December 27, 2012 Appeal Denial (DOW0012894-940, at pp. 2-3).

ongoing formula, the Current Formula Benefit, and a near-frozen formula, the Grandfathered Formula Benefit. The recognition of further compensation and service under the Grandfathered Formula Benefit ceased only six months after Mr. Johnston transferred back to Dow.

93. Because Mr. Johnston has raised a question about the determination of his Average Annual Compensation used in determining his Grandfathered Formula Benefit, it will be helpful to look at the relevant sections of the plan document. Article I, Section 7 defines Average Annual Compensation:

... an Employee's Average Annual Compensation shall be the highest mean Annualized Compensation computable for any three consecutive full calendar years during the Employee's period of Credited Service.<sup>14</sup>  
[Article I, Section 7 (a)]

94. Article I, Section 7 (b), (c), and (d) go on to refine the definition in non-standard situations where the Employee has, for example, fewer than three years of consecutive full calendars of service, or has returned from a leave of absence less than three years prior to termination or retirement. In these instances, the plan document specifically defines Average Annual Compensation in a way that does not require three full consecutive years of compensation history. In general, the plan requires the use of annual compensation amount multiplied by a factor of .925.
95. The .925 factor has widespread applicability in a variety of plan situations, including, as I will describe later in this report, in the calculation of the amount of the Grandfathered Formula Benefit for purposes of calculating Mr. Johnston's benefit under the applicable DDE to Dow transfer section, Section 10.46.

#### **IV. E. 8. Dow's Pension Transfer Provisions and Their Applicability to Others in the Proposed Class**

96. There are several other employees who transferred back from DDE whose situations are different from that of Mr. Johnston. Relevant differences include dates of transfer to and/or from DDE, whether or not the transfer to DDE (if any) was accompanied by a 414(l) asset and benefit transfer, and also whether a person worked at another Dow or DDE-affiliated entity. These individual distinctions are important and so the applicability of Sections 9.6 and 10.46 may be different from the applicability of these Sections to Mr. Johnston. Section 10.46 in particular has different subsections to accommodate these differences, despite the fact that all subsections share the common goal of approximating a "make whole" total pension when considering pensions from all sources.

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<sup>14</sup> See Dow Employees' Pension Plan Article I, Section 7 (a).



97. For example, for the eight participants who, according to the DDE offset spreadsheet, were not part of the 414(l) asset and benefit transfer,<sup>15</sup> both the numerator of the proration fraction used in Section 9.6 as well as the DDE offset in Section 10.46 are calculated distinctly differently from Mr. Johnston. These eight participants do not present the same duplication of benefits situation that Mr. Johnston does because they do not receive credit for benefit accrual purposes for their first period of Dow Service under the DDE plan. Thus, the numerator of the fraction in Section 9.6 would appropriately include the first period of Dow service as credited service for benefit accrual purposes, and the DDE offset in Section 10.46 would appropriately prorate the DDE offset to approximate a DDE-service-only pension for purposes of achieving the make-whole objective of Section 10.46.

## V. OPINIONS

**V. A. First Opinion: The Dow plan administrator interpreted the plan by applying the provisions of plan Section 10.46 to calculate Mr. Johnston's pension benefit upon his retirement. As a consulting actuary, I would advise the Dow plan administrator that this interpretation is reasonable, and in fact is the only reasonable interpretation of the plan provisions. Further, the Dow plan administrator's calculations of Mr. Johnston's pension under Section 10.46 appear to be correct.**

98. As I stated earlier, Section 10.46 was added to the plan on June 6, 2006,<sup>16</sup> following Mr. Johnston's second transfer (DDE back to Dow) and replaced Section 9.6 specifically for DDE employees transferring back to Dow.
99. The plan administrator relied on this language in Section 10.46 to conclude that Section 10.46 should be used in calculating Mr. Johnston's pension:

*Section 10.46 Transfers from DuPont Dow Elastomers Pension and Retirement Plan.*

Effective July 1, 2005, DuPont Dow Elastomers, L.L.C (DDE) ceased to exist as a joint venture of The Dow Chemical Company and E.I. DuPont DeNemours and Company (DuPont) ("Event"). Before this Event, transferred Employees were treated in accordance with Section 9.6 (a)(vi).<sup>17</sup> Upon and after this Event, former employees of DDE were

<sup>15</sup> DDE Offset Spreadsheet (DOW0013669-691); Watson Wyatt Presentation (DOW0013628-13650, at 13634-35, 13640); Email re: DDE Integration into DowPAS (DOW0021835-21859, at 21843, 21849).

<sup>16</sup> Sixth Amendment to Dow Employees' Pension Plan (DOW0009620-0009623).

<sup>17</sup> In the Summary and Analysis of Robert Johnston's Benefit Appeal, the plan administrator states the reference to Section 9.6(a)(vi) should have been to Section 9.6(b). Section 9.6(a) is labeled as for transfers

transferred to the Company. Such former employees can be categorized as follows:

- Employees who were first hired by DDE;
- Former employees who were transferred to DDE from DuPont;
- Former employees who were transferred to DDE from the Company.

The purpose of this Section is to set forth the provisions regarding the retirement benefits to be provided to such transferred former employees.

Section 10.46 goes on to describe how the Dow pension should be calculated for these groups of employees.

100. From the language in the plan document, I would advise the Dow plan administrator, based on my expertise, that a reasonable and correct interpretation is to calculate Mr. Johnston's benefit under the provisions of Section 10.46.

101. Looking to the provisions of Section 10.46 in lieu of Section 9.6 for purposes of calculating Mr. Johnston's pension, as the plan administrator did, is consistent with the way plan administrators customarily interpret such provisions. Section 10.46 was adopted more recently with its specific purpose described in detail, and acknowledges the appropriate use of Section 9.6 prior to the cessation of DDE. I see no basis for applying Section 9.6 in this situation.

102. I have reviewed the plan administrator's calculation of Mr. Johnston's pension and I believe that it reasonably and properly reflects the relevant plan provisions of Section 10.46. This includes the use of the .925 factor under Section 10.46. My analysis of the plan administrator's calculation is in Exhibit 1.

103. Section 10.46 dictates that for employees who, at their termination, have less than three years since they returned from DDE, Average Annual Compensation will be based on the highest rate of pay (including applicable incentive compensation) while at Dow times .925. The plan's definition of Average Annual Compensation also contains similar language. In Mr. Johnston's case, his applicable benefit utilizes "Average Annual Compensation as of December 31, 2005" because his grandfathered formula benefit, which is frozen as of that date, is higher than his current formula benefit at his retirement date.<sup>18</sup> This means that, in effect, Average Annual Compensation is determined as if Mr. Johnston terminated on that date. As such, since that was less than three years

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before January 1, 1996 and Section 9.6(b) applies to transfers on or after that date. DDE was not formed until April 1996. In any event, the calculation described in 9.6(a)(vi) is the same as the calculation in 9.6(b)(i)(B) when applied to Mr. Johnston.

<sup>18</sup> Towers Calculations, Robert Johnston (DOW0020402-20497, at 0020428-29).

after his return from DDE, the plan requires using the .925 factor to calculate Mr. Johnston's Average Annual Compensation for purposes of the Grandfathered Formula Benefit.

104. Mr. Altman in his third opinion asserts that the .925 factor should not have been applied. To fail to apply the .925 factor would mean the Plan Administrator was disregarding the explicit terms of the plan.
105. Additional notes related to my review of Mr. Johnston's pension calculation are included in Exhibit 1.

**V. B. Second Opinion: Section 10.46 of the Dow plan has the effect of a "make-whole" provision for Mr. Johnston and the other members of the proposed class. Specifically, because of Section 10.46, Mr. Johnston and the other proposed class members are assured that, for each of them, their total pension from DDE and Dow approximates the pension they would have received if they each had worked at Dow for all periods of service.**

106. Make-whole provisions are common features of pension plans where the sponsoring employer wishes to facilitate employee transfers by signaling that employees taking on special assignments will not be disadvantaged. Pension transfer features must be carefully crafted in order to achieve this "make-whole" objective.
107. Section 10.46(c)(i) achieves the "make-whole" objective for Mr. Johnston. The provision effectively sets a hypothetical whole-career pension target based on a calculation assuming all years of Dow and DDE service were considered as credited service in the pension formula. It then defines the Dow pension benefit such that the value of the Dow pension plus the value of the DDE pension together are approximately equal to that hypothetical whole-career target pension<sup>19</sup>:

Former employees transferred to DDE from the Company, as part of the asset transfer July 1, 1997 to the DuPont Dow Elastomers Pension and Retirement Plan, who are transferred back to the Company shall be granted Vesting Service, Eligibility service and Credited Service equal to the corresponding service earned under the Plan before such transfer plus the service earned under the DuPont Dow Elastomers Pension and Retirement Plan. Provided, however, that any benefit earned under the

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<sup>19</sup> Because a participant may commence his or her Dow pension and the DDE pension can commence on different dates, the amount of Dow pension and DDE pension benefit may not be equal to the full service pension target. However, the value of Dow pension plus DDE pension should approximately equal the hypothetical whole-career target pension.

Plan shall be reduced by any benefit, subject to reduction for early commencement as set forth below, that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan.

**V. C. Third Opinion: Pensions calculated under Section 10.46 are larger than those calculated under Section 9.6 for Mr. Johnston and the other members of the proposed class.**

108. As discussed above, Section 10.46 is a “make-whole” provision that bases the participant’s pension on all service with Dow and DDE aggregated together, minus the estimated pension from DDE. I will call this procedure the Section 10.46 offset calculation, with the estimated DDE pension called the DDE offset. Generally speaking, the Section 10.46 offset calculation is an improvement over the Section 9.6 proration calculation.

109. To confirm this opinion, for Mr. Johnston and each of the other proposed members of the class, I have estimated the age 65 accrued pension benefit as of December 31, 2006 under the Section 10.46 offset calculation and under the Section 9.6 proration calculation. The December 31, 2006 date is the end of the calendar year when Section 10.46 was put into the plan. The result is that the Section 10.46 offset calculation provides a greater age 65 accrued pension benefit than the Section 9.6 proration calculation for all members of the proposed class. The details of my calculation are in Exhibit 12. The data sources and assumptions are documented in Exhibit 15.

110. I also tested the scenario where the December 31, 2006 accrued benefit is immediately payable on January 1, 2007, rather than at age 65. Again, the Section 10.46 offset calculation provides a greater pension benefit than the Section 9.6 proration calculation for all members of the proposed class. See Exhibits 13 and 15 for calculation details.

111. Additionally, I considered the benefits as of December 31, 2014, where any actual termination and benefit commencement dates are reflected through December 31, 2014 for those that have retired, and those who have not commenced pension benefits are assumed to terminate and commence on January 1, 2015. Again, for all members of the proposed class, the Section 10.46 offset calculation provides a better pension benefit than the Section 9.6 proration calculation. See Exhibits 14 and 15 for calculation details.

112. The results of these three scenarios are summarized in Exhibit 6. This exhibit shows that the pension benefits as of December 31, 2006, under the Section 10.46 offset calculation generally exceed the benefits under the Section 9.6 proration calculation by at least 300%. Because of this large margin of

improvement, different commencement dates are extremely unlikely to make the Section 9.6 proration calculation the better pension benefit.

113. Therefore, I conclude that the Section 10.46 calculation increased benefits over the Section 9.6 proration calculation, and there was no cutback of accrued benefits due to the addition of the Section 10.46 transfer provision.
114. Not only was there no cutback of accrued benefits as of December 31, 2006, but the results from these three scenarios also allow me to draw the conclusion that the Section 10.46 offset calculation is expected to produce a better result than the Section 9.6 proration calculation for all impacted participants throughout their careers.
115. Thus, Mr. Johnston has suffered no harm due to the amendment of the plan to add Section 10.46.
116. Further, the *only* way the Section 9.6 proration calculation could produce better benefits than the Section 10.46 offset calculation is when service is double counted as in Mr. Altman's proration methodology. I will refer to this alternative methodology as the Section 9.6 "windfall proration" methodology. However, that methodology uses an incorrect application of the plan provisions. Thus, I disagree with Mr. Altman's first opinion that Section 10.46 is an impermissible reduction in the participant's accrued benefit.
117. Furthermore, the addition of Section 10.46 did not reduce future accrual rates (as described in the regulations under IRC Section 204(h)) as Mr. Altman contends in his second opinion. Section 10.46 not only improved the accrued pension benefit relative to the Section 9.6 benefit (with the proration as applied by the plan administrator), but it improved the projected normal retirement benefit assuming continued service. In fact, the future accrual rate under Section 10.46 is simply the accrual rate under the current Dow formula. On the other hand, the future accrual rate under the Section 9.6 proration calculation is also the accrual rate under the current Dow formula, but may be slightly lower due to the proration arithmetic.<sup>20</sup> Thus, I conclude that there is also no cutback

<sup>20</sup> Assume the accrued benefit at time  $t$  and  $t+1$  are  $B_t$  and  $B_{t+1}$ , respectively. Then the annual accrual under the 10.46 offset methodology is  $B_{t+1} - B_t$ , and the annual accrual under the 9.6 proration methodology is  $B_{t+1} * \left(\frac{A+1}{t+1}\right) - B_t * \left(\frac{A}{t}\right)$ , where  $A$  is the prorated service. Taking the difference, we have

$$(B_{t+1} - B_t) - \left( B_{t+1} * \left(\frac{A+1}{t+1}\right) - B_t * \left(\frac{A}{t}\right) \right) = (t-A) \left[ \frac{B_{t+1}}{t+1} - \frac{B_t}{t} \right]$$

The quantity in brackets represents the difference in average accrual rates over time. Dow's current formula benefit generally qualifies as a statutory hybrid plan. In this situation, the hypothetical account balance can be used as the accrued benefit. If we let  $B_t$  and  $B_{t+1}$  be the hypothetical account balance at time  $t$  and  $t+1$ , then the average accrual rate is a non-decreasing function of time for the Dow current formula benefit. Therefore, the quantity inside the bracket is

in future benefit accrual rates as a result of the addition of Section 10.46 to the plan.

**V. D. Fourth Opinion: Assuming Section 9.6 did apply to Mr. Johnston's pension benefit, the Dow plan administrator would have applied the Section 9.6 provisions by excluding the first period of Dow service from the numerator required in the calculation. As a consulting actuary, I would advise the Dow plan administrator that this application of Section 9.6 was reasonable and consistent with the terms of the plan.**

**V. D. 1. When Mr. Johnston transferred to DDE in 1996, Dow relinquished any responsibility for any pension benefit or credited service for benefit accrual purposes during his first period of Dow employment. This was and is fair, appropriate, and reflective of common practice when a Section 414(l) asset and benefit transfer occurs.**

118. Absent employee transfers, the Dow plan generally counts Dow employment as credited service under the Dow pension formula. Mr. Johnston was hired in 1980 and was earning credited service under the Dow pension plan up to the point of his transfer to DDE in 1996. Because the Dow plan is a defined benefit plan Dow also would have made contributions to the Dow plan that took into account Mr. Johnston's credited service for that period.

119. However, by the terms under which the DDE joint venture was established, Dow transferred to DDE full responsibility for Mr. Johnston's Dow pension benefits earned during Dow employment prior to the transfer (his first Dow service).<sup>21</sup> The transfer of the pension responsibility for Mr. Johnston and others transferred from Dow to DDE was accomplished by a Section 414(l) asset and benefit transfer, as described earlier in my report in paragraph 70.

120. When the 414(l) asset and benefit transfer was completed, the Dow plan's pension obligation to Mr. Johnston under the Dow plan was effectively extinguished. However, his pension did not disappear. It was merely transferred to the DDE plan by agreement of the plan sponsors involved. In my experience, this sort of pension transfer is common between two pension plans, as long as the receiving plan, in this instance the DDE pension plan, fully accepts responsibility for the pre-transfer pension benefit. This was the case, as was evidenced by the actual transfer of assets from the Dow plan to the DDE plan. As a result, the only change with respect to Mr. Johnston's accrued pension

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not less than zero. Thus the future accrual rate under the 10.46 offset methodology is equal to or greater than the future accrual rate under the 9.6 proration methodology.

<sup>21</sup> Human Resources Matters (DOW0001060-1070, at 1065-67). Dow Letter to Johnston (DOW0004534); PowerPoint Presentation (P001659-1673, at 1660-1662); Dow Letter from J. VanAlsten (DOW0001131-1137).

benefit at that time was that the DDE plan assumed the responsibility to pay it.

121. Had Mr. Johnston terminated employment or retired directly from DDE following his transfer to DDE, he would have been entitled to a pension from DDE and that pension would have reflected both pre- and post-transfer (to DDE) employment. Further, he would have not been entitled to a pension from Dow. In my opinion, this is entirely fair and correct, and fully recognizes credited service during both Dow and DDE employment. Mr. Johnston would not have been disadvantaged by Dow having relinquished responsibility for the Dow pension by effecting a 414(l) asset and benefit transfer to DDE.
122. In my experience, companies that transfer pension responsibility under a 414(l) asset and benefit transfer do so with the expectation and intention that the transfer will fully eliminate any responsibility for paying any further pension benefits to transferred employees, while assuring that there is no loss of pension benefits because the pension obligation is picked up by the new receiving plan.
123. While it is true that Mr. Johnston and other transferred employees could still claim that they were previously employed at Dow, this is not the same as maintaining rights to pension credit under the Dow pension plan for those years of employment. With the 414(l) asset and benefit transfer, the transferred employees' credited service for benefit accrual purposes under the Dow pension plan for pre-transfer Dow employment (i.e., the first period of Dow service) was eliminated.

**V. D. 2. Mr. Johnston's return to Dow after his employment at DDE did not cause his pre-DDE Dow employment years to be re-established as credited service for benefit accrual purposes under the Dow pension plan. This was and is fair, appropriate, and reflective of common practice in situations where there is no pension transfer under Section 414(l).**

124. Mr. Altman reads the Dow plan to provide that Mr. Johnston's first Dow service is somehow reestablished as credited service for benefit accrual purposes in the Dow plan. This is incorrect.
125. When Mr. Altman applies Section 9.6, he includes the first period of Dow service in the numerator of the service ratio. He states that he takes this approach because "Nothing that I read in this provision or in any other relevant section of the Plan excludes from the definition of 'Credited Service with the Company' years which were subject to the asset transfer from Dow to DDE."<sup>22</sup> Thus, Mr. Altman is asserting that the service that had been subject to a 414(l) asset and

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<sup>22</sup> Altman report, Paragraph 9.

benefit transfer should have been reconstituted under the Dow plan, when Mr. Johnston returned to Dow employment in 2005.

126. Unlike Mr. Johnston's transfer from Dow to DDE in 1996, his return to Dow in 2005 did not involve a 414(l) asset and benefit transfer, and so involved no transfer of pension responsibility and no transfer of assets from the DDE plan to the Dow plan. Thus, there was no basis for re-establishment of his credited service for the first period of Dow employment because the credited service for benefit accrual purposes effectively remained with DDE and continued to be recognized by the still-surviving DDE pension plan.
127. For Mr. Johnston, this created a not-uncommon situation where, after his return to Dow, his period of Dow *employment* could accurately be described as beginning in 1980, but where his *credited service* for Dow pension benefit accrual purposes commenced upon his return to Dow employment in 2005.
128. In my experience, the non-alignment of employment service and credited service for benefit accrual commonly occurs when the covered employee is involved in a 414(l) asset and benefit transfer. Another example of such nonalignment occurs when employees who are rehired after receiving a lump sum pension for an initial period of credited service may have all service counted for employment and even pension eligibility purposes (such as for determining eligibility for early retirement), but credited service for pension benefit accrual purposes would be reset to zero upon rehire.
129. Companies commonly seek to avoid pension windfalls or inappropriate enrichment of covered plan participants by designing transfer provisions that avoid double-counting of service credit. Such a windfall can happen if service credit is granted in two different pension plans for the same period of employment.
130. In Mr. Johnston's case, the Dow plan administrator's application of Section 10.46 produces neither a windfall nor a shortfall. Mr. Johnston is receiving a pension under the DDE plan covering both DDE service and service during his first period of Dow employment. He is also receiving a pension under the Dow plan based on credited service from his second period of Dow employment. Thus, all of Mr. Johnston's service is being counted across the two pension plans, but there is no double-counting of service across the two pension plans.
131. Figure 4 summarizes the recognition of credited service for benefit accrual purposes under Section 9.6 during each period of employment and at each transition point in Mr. Johnston's career using the plan administrator's interpretation of that provision. First, recall that Section 9.6 employs a ratio to determine benefits. Specifically, all service may be used in the determination of the hypothetical whole-career pension benefit and in the denominator of the



ratio that the hypothetical whole-career pension is multiplied by. But the recognition of credited service for benefit accrual purposes is, in effect, controlled by the service in the numerator, which is the focus of Figure 4.

Figure 4

Sequence of time	What credited service is recognized for benefit accrual purposes?		Comments
	The Dow Plan	The DDE Plan	
During initial Dow employment	First Dow Service	None	
At time of first transfer (Dow to DDE)	None	First Dow Service	414(l) transfer occurs; Mr. Johnston is kept whole by the service transfer from the Dow plan to the DDE plan
During DDE employment	None	First Dow Service + DDE Service	
At time of second transfer (DDE back to Dow)	None	First Dow Service + DDE Service	No 414(l) transfer, so both the first Dow service plus the DDE service stay with the DDE plan
During second Dow employment	Second Dow Service	First Dow Service + DDE Service	The accruing Dow pension is based on only the second Dow service because the DDE pension continues to be based on the first Dow service plus the DDE service
At retirement – based on how the Dow and DDE transfer provisions work	Second Dow Service	First Dow Service + DDE Service	No loss of credited service recognition and no windfall due to double-counting of service

**V. D. 3. As a consulting actuary, I would advise the Dow plan administrator that it is reasonable and appropriate to exclude the period of first Dow service in the numerator of the proration factor when determining Mr. Johnston's Dow pension under Section 9.6. Excluding such service is essential to adhere to the non-duplication provision of Section 4.10 and to avoid a windfall for Mr. Johnston.**

132. Given that Mr. Johnston's DDE benefit includes the period of his first Dow service, the correct application of Section 9.6 is to exclude Mr. Johnston's period of first Dow service from the numerator of the proration factor. While Mr. Johnston was employed by Dow during the first period of service, that service should no longer be considered credited service for benefit accrual purposes under the Dow plan because the pension benefit attributable to that service was fully and permanently transferred to DDE at the time of the first transfer (Dow to DDE).
133. Further, including the period of first Dow service as credited service for purposes of the numerator of the proration factor would be a violation of the non-duplication provision of the plan, Section 4.10. Such inclusion would mean that this period of first Dow service would be counted twice for pension calculation purposes: once in the DDE plan and again in the Dow plan. The non-duplication provision is clear and unambiguous in prohibiting this double use of credited service.
134. Including the period of first Dow service as credited service for purposes of the numerator of the proration factor would result in a windfall for Mr. Johnston that is inconsistent with commonly accepted and applied pension plan design principles.
135. Mr. Altman in his fourth opinion asserts there is no evidence that Dow amended the Plan to indicate that the service credited under the Dow plan would no longer be counted as credited service. To the extent one finds any ambiguity in Section 9.6 about the credited service to be used in the numerator of the proration fraction, the actions taken by the plan to execute a 414(l) asset and benefit transfer and the plan's explicit non-duplication of benefits clause is strong evidence that the Dow plan administrator was on solid ground regarding its interpretation of the Plan in this regard. Thus, in my opinion, the Dow plan administrator's exclusion of the first period of Dow service from the Section 9.6 numerator was reasonable and appropriate.

**V. E. Fifth Opinion: Mr. Altman's calculations of pension benefit amounts and damages are wrong. Mr. Altman's calculations are based on incorrect inputs and assumptions, and ignores important information about individual participants. Further, Mr. Altman's calculations are unreliable because he has provided insufficient information to verify his calculations.**

136. I have been asked to review Mr. Altman's calculation of damages. The calculation of damages involves the calculation of pension benefits under the plan administrator's and Mr. Altman's methodologies, followed by a conversion of the resulting differences into a monetary value. Since the calculation of

damages starts with the calculation of benefits, I will first address Mr. Altman's calculation of benefits.

137. I have reviewed the calculations involving the list of participants provided in Mr. Altman's report and calculations provided by Towers Watson. In addition, I have prepared independent benefit calculations.
138. As Towers Watson is the firm retained by Dow's plan administrator to routinely perform the benefit calculations required under the plan, I have used the data supplied by the plan sponsor and Towers Watson to perform my independent analysis. I have reviewed the data for reasonableness and consistency, but have not performed an audit on the accuracy of the data.

**V. E. 1. Mr. Altman used incorrect inputs and ignored important participant information.**

139. Mr. Altman used incorrect inputs in his benefit calculations. In the pages following Exhibit I of his report where the compensation for his sample calculations were shown, the compensation used did not have the annual target bonus included as part of the compensation. For example, the final 3-year average compensation for the current formula benefit should be \$12,208 per month for Mr. Johnston, but Mr. Altman has used \$10,642 per month because he excludes annual target bonus. Thus, Mr. Altman's all-service Dow benefit is understated. When the all-service Dow benefit is lowered relative to the DDE offset, Mr. Altman's Section 10.46 offset calculation produces an amount that is smaller than the Section 9.6 calculation in certain situations. Restated, Mr. Altman's understatement of compensation can have the effect of overstating damages.
140. Mr. Altman also used incorrect basic annual accruals. In the pages following Exhibit I of his report where the annual accruals for the Current Benefit Formula benefit are shown, the basic accrual percentage did not take into account the transitional accruals under the plan. For Mr. Johnston, the transitional accrual is 43.3% of the final average compensation.
141. Using incorrect compensation amounts and ignoring transitional accruals dramatically distorts Mr. Altman's calculations of participants' accrued benefits. In Exhibit 2 and Exhibit 3, I have calculated what the accrued benefit would be for Mr. Johnston and Participant 18 had the correct compensation and basic annual accruals been used for the calculations. For Mr. Johnston and Participant 18, Mr. Altman's accrued benefit was significantly lower than the correctly calculated accrued benefit.

142. Further, incorrect DDE offsets were used by Mr. Altman in his calculations regarding the eight individuals who transferred after July 1, 1997. Since these individuals transferred after July 1, 1997, and benefits and assets were not transferred for them, their pre-DDE Dow service did not transfer to DDE. The DDE plan (to be clear, this is about the DDE plan provisions, not Dow's Section 9.6) calculates its benefit using both pre-DDE Dow service and DDE service and then multiplies by a ratio of DDE credited service over pre-DDE Dow plus DDE service. This prorated amount is the benefit under the DDE plan, and is therefore the basis for the DDE offset in the Dow plan. In Exhibit I of Mr. Altman's report the pre-prorated DDE benefit appears to have been incorrectly used as the DDE offset. This appears to be a mistake in Mr. Altman's understanding of the data and the DDE plan, as no challenge has been made to how the DDE plan determines its benefit. Had the correct offset been used, Mr. Altman's own results would have shown that there were no damages for these eight participants. In fact, these eight participants benefited from Section 10.46, even after double-counting with the Section 9.6 windfall proration methodology. See Exhibit 4 for details.

143. Finally, certain of Mr. Altman's service inputs are questionable. In Exhibit I of his report, the following service figures are questionable and appear to be inconsistent.

- a. Participant 31 DDE service is reported as 24.88. It is not clear why the DDE service exceeds the length of the DDE joint venture. This appears to have been changed in a revised version of Altman Exhibit I submitted at 5:48 p.m. on the date of this report.
- b. Participant 7 has total service of 22 years and Participant 26 has total service of 19 years. These service figures appear not to include pre-July 1, 1996 Dow service.
- c. For Participant 33, Participant 36 and Participant 43, the service figures as reported in Mr. Altman's report appear to be lower than the service calculated from the date of hire.

144. In summary, some input items such as compensation apply to all participants, while the transition credits and the appropriate DDE offset may apply to certain individuals. The cumulative impact of these inaccuracies makes Mr. Altman's benefit calculations, and therefore any calculations of damages dependent upon them, unreliable.

**V. E. 2. Mr. Altman ignored the amounts of benefits that certain participants are actually receiving under Section 10.46 when calculating damages.**

145. Some members of the proposed class are already receiving benefits. I observed that Mr. Altman's calculations of the current benefits for these individuals did

not match the actual benefits they are receiving, and in most cases are lower than the benefits calculated by Towers Watson, even though Mr. Altman's report indicates that he reviewed this information. Any damage calculation should be measured against actual benefits when they are known, not hypothetical amounts, especially hypothetical amounts that are skewed in a direction that overstates the damages calculation.

**V. E. 3. Mr. Altman's calculations cannot be verified because he has provided insufficient explanation.**

146. In conducting my analysis of Mr. Altman's damages calculation, I have performed independent calculations of the participants' pension benefits. However, in my experience, an appropriate assessment of actuarial calculations is not merely a comparison of results, but it involves an evaluation of data, methodology, and the basis for any conclusion reached as a result of these calculations. To understand the appropriate use and limitations of Mr. Altman's results, I examined the causes and the differences between the plan administrators' calculations and Mr. Altman's.

147. Benefit calculations have many moving parts. An error in one area may be offset by an error in another area. For example, an understatement in pay may be offset by a lesser reduction in early retirement factors. Offsetting errors may make some calculations appear reasonable, but not for all calculations. Furthermore, it is important to see if the same calculation methodologies are applied consistently to all participants. For all these reasons, the report should provide enough details to assess the damage calculations appropriately.

148. Mr. Altman's report did not provide sufficient detail in the following areas:

- a. There is not enough detail to allow me to assess whether the inputs were used consistently from individual to individual. Based on the two sample calculations, I was able to see issues with the participants' pay and transition accruals. However, for the other participants, less detail was provided, and I was unable to determine the extent of the problem, and whether the discrepancy between my calculation and Mr. Altman's calculation can be explained by the difference in pay and transition accruals.
- b. There is not enough detail to allow me to assess whether different early retirement factors for different benefits were applied correctly. More generally, there is not enough detail that would allow me to conclude that the appropriate calculation procedures were followed consistently for all participants.
- c. Although certain supplemental information regarding Mr. Altman's calculations was provided June 25 through plaintiff's counsel, assumptions were not properly documented within the Mr. Altman's

expert report. For instance, pay increase assumptions, the interest rate basis for the lump sum factors, and the use of a mortality improvement scale were not adequately disclosed within the report.

As a result, it is impossible to ascertain the reasonableness of Mr. Altman's damages calculation.

149. The inadequacy of the documentation is not trivial to actuaries. Actuaries are subject to Actuarial Standards of Practice (ASOPs) promulgated by the Actuarial Standards Board. ASOP 17 addresses expert testimony specifically, and requires compliance with other applicable ASOPs (Section 3.2). Most notable in this situation is ASOP 41, which sets communications standards for all actuarial work. When actuarial findings are to be relied upon, they should be documented in an actuarial report. From paragraph 3.2 of ASOP 41 (emphasis added):

In the actuarial report, the actuary should state the actuarial findings, and identify the methods, procedures, assumptions, and data used by the actuary with sufficient clarity that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work as presented in the actuarial report.

As noted, when I was asked to review Mr. Altman's report, I found the supporting information insufficient for me to make an objective appraisal of the reasonableness of the damage calculation, much less a complete replication. And while some of the missing documentation was subsequently provided (on June 25, 2015) – specifically, details about the pay increase assumption, the interest rate basis, and use of a mortality improvement scale – the other insufficiencies noted above remain.

150. The observed errors in Mr. Altman's calculations and the lack of detail supporting his calculations lead me to conclude that his damages calculation should not be relied upon.

**V. F. Sixth Opinion: Each proposed class member's benefit is highly dependent on individual circumstances. When comparing benefits provided under the Section 10.46 offset calculation with the Section 9.6 "windfall proration" calculation, there is no consistent pattern of differences due to the wide variety of individual circumstances. Further, the Section 9.6 "windfall proration" calculation yields a lower benefit in many circumstances.**

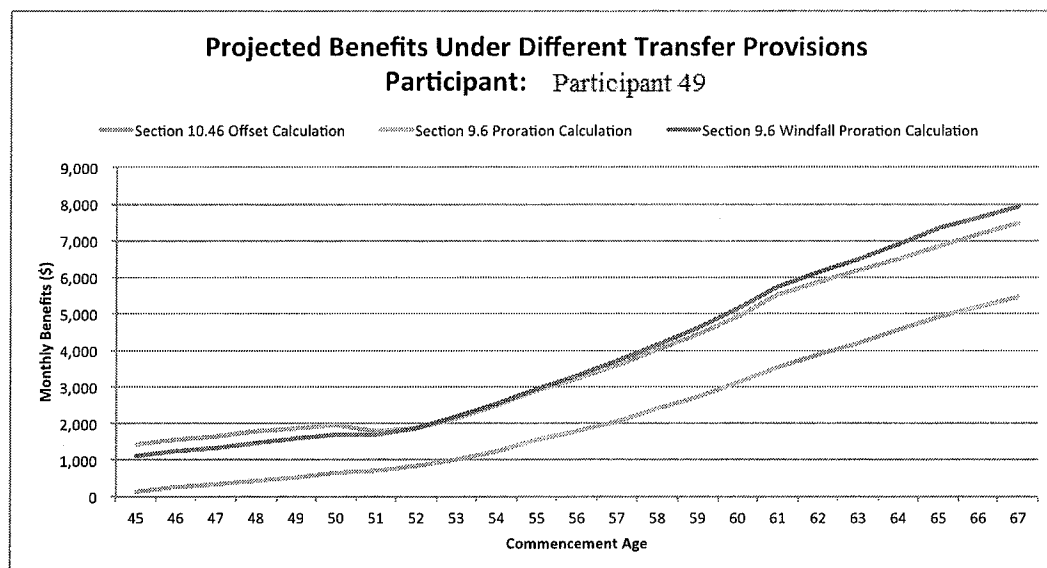
151. An important observation from my calculations is that the interplay between the grandfathered formula benefit, the current formula benefits and the DDE offset gives rise to a variety of ways in which Dow benefit can be calculated.

The final Dow pension benefit depends on whether the grandfathered formula benefit or the current formula benefit is the winning benefit, and on the relative size of the DDE offset.

152. Earlier in this report, I established that the Section 10.46 offset calculation is an improvement over the Section 9.6 proration calculation. While it is my opinion that the “windfall proration” is not proper under the terms of the plan, for purposes of this opinion, I have compared the Section 10.46 offset calculation against the Section 9.6 “windfall proration” calculation.
153. Because of the interplay between the different benefits involved, whether the Section 10.46 offset calculation or the Section 9.6 “windfall proration” calculation is better differs from individual to individual and can change over time for certain individuals. When comparing these calculated benefits, I looked at the resulting benefits at multiple points of time over a participant’s career (a longitudinal study) and also at every impacted participant’s benefit at a particular point in time (a cross-sectional study).
154. Figure 5 illustrates different benefit projections for Participant 49 over her career. The green line shows the benefits using Section 10.46 offset calculation. The orange line shows the benefits using Section 9.6 proration calculation. The red line shows the benefits based on Mr. Altman’s Section 9.6 “windfall proration” calculation. Notice that the lines representing the Section 10.46 offset calculation and the Section 9.6 “windfall proration” calculation cross at age 52. Thus if Participant 49 were to retire prior to age 52, the Section 10.46 offset calculation is a better benefit. But if Participant 49 were to retire on or after age 52, the Section 9.6 “windfall proration” calculation will produce a better benefit. Thus, whether the Section 9.6 windfall proration calculation is better than the Section 10.46 offset calculation depends on the participant’s retirement date. Exhibit 11 has the data underlying Figure 5.



Figure 5

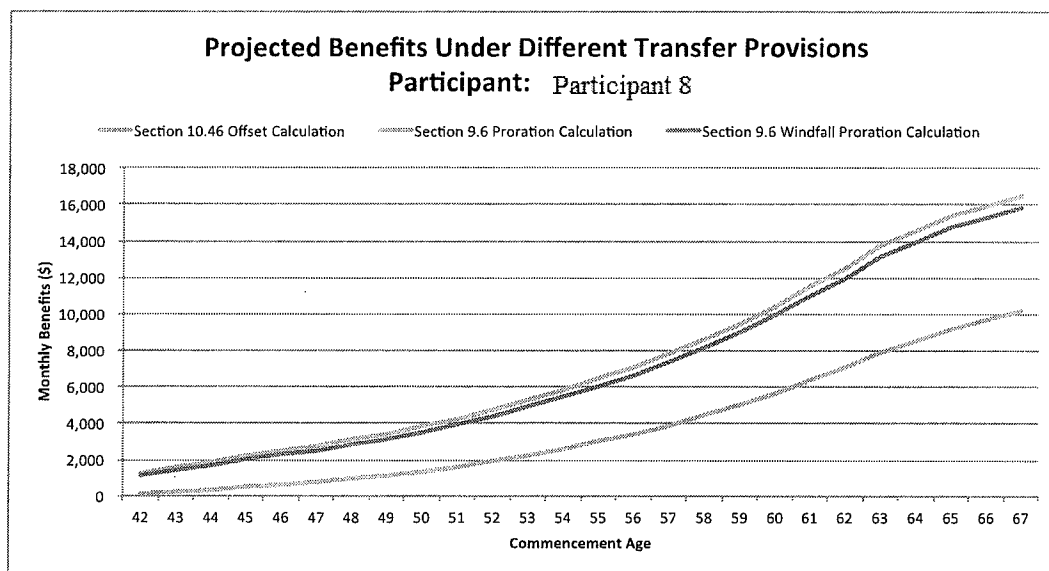


155. The kinks in Participant 49 benefit lines are the result of the grandfathered formula benefit, the current formula benefit, and the DDE offset each providing a different level of benefits and having different early retirement reduction factors.

156. Figure 6 illustrates different projected benefits for Participant 8. The Section 10.46 offset calculation is the highest benefit, even better than Mr. Altman's Section 9.6 "windfall proration" calculation throughout Participant 8's career. He is an example of an employee who transferred after July 1, 1997 and who has a different Section 10.46 offset calculation than those that transferred prior to July 1, 1997. The data underlying Figure 6 is in Exhibit 10.



Figure 6



157. The calculation of alleged damages depends on the difference between the Section 10.46 offset calculation and the Section 9.6 “windfall proration” calculation. The illustrations of Participant 49 and Participant 8’s projected benefits show that whether the alleged damages exist can change depending on the actual retirement date, and in the case of Participant 8, there may be no damages at all.

158. In Figure 7 (also in Exhibit 7), I show the difference of the pension benefits under the Section 10.46 offset methodology and the Section 9.6 “windfall proration” methodology for all participants under consideration. It shows that the magnitude and direction of the difference varies greatly from individual to individual. The winning calculation is very individualistic; it depends on each individual’s employment history, compensation history, and eligible pension formulas.

Figure 7

	Monthly Accrued Benefits as of 12/31/2006*		Monthly Benefits as of 12/31/2006 and Paid on 1/1/2007		Monthly Benefits as of 12/31/2014 and Paid on 1/1/2015**	
	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"
Participant 1	\$3,106	\$475	\$795	\$126	\$2,680	-\$194
Participant 2	4,831	-762	2,065	-128	2,344	-681
Participant 3	2,210	-3,310	378	168	1,166	231
Participant 4	4,735	468	908	9	3,145	-92
Participant 5	2,403	-1,292	218	65	942	248
Participant 6	10,496	-339	2,972	190	3,227	42
Participant 7	3,838	-650	1,353	-275	2,328	-1,075
Participant 8	8,868	-1,173	1,117	125	3,497	321
Participant 9	2,587	-114	898	51	1,789	-383
Participant 10	7,964	-1,598	3,228	-443	4,492	-1,794
Participant 11	3,857	544	1,473	195	1,698	118
Participant 12	2,324	-1,349	449	217	1,687	183
Participant 13	2,803	-315	1,195	2	1,972	-377
Participant 14	8,071	-2,889	3,228	-1,321	6,542	-2,351
Participant 15	3,521	-1,461	386	71	1,592	371
Participant 16	1,701	511	315	65	1,085	71
Participant 17	2,651	-847	2,651	-847	2,651	-847
Participant 18	6,477	-1,520	2,677	-649	2,849	-1,111
Participant 19	4,592	56	987	-8	3,051	-248
Participant 20	685	309	340	71	528	72
Participant 21	4,486	-755	1,918	-178	4,234	-965
Participant 22	5,328	-846	1,626	-41	3,469	-1,074
Johanson, Robert	5,924	-836	2,241	276	2,586	-428
Participant 23	3,443	939	1,241	403	2,107	287
Participant 24	2,323	721	385	65	1,575	206
Participant 25	4,580	-367	1,285	29	3,031	-569
Participant 26	1,214	1,071	539	294	2,486	-454
Participant 27	4,728	-1,354	1,969	-818	2,641	-1,513
Participant 28	2,959	293	691	55	2,206	-222
Participant 29	6,883	15	1,729	17	5,187	-743
Participant 30	4,171	-1,348	1,807	-276	3,886	-1,745
Participant 31	3,925	-367	1,466	187	1,531	-130
Participant 32	6,258	143	1,675	222	3,824	-240
Participant 33	4,202	357	1,896	126	4,353	217
Participant 34	5,579	-1,251	962	107	2,079	170
Participant 35	1,457	738	310	141	484	186
Participant 36	2,548	496	553	105	1,317	190
Participant 37	1,188	887	121	62	348	197
Participant 38	3,846	1,020	411	88	1,333	202
Participant 39	2,687	611	979	16	2,858	-140
Participant 40	3,003	-239	1,206	9	1,857	-522
Participant 41	9,135	-5,691	9,135	-5,691	9,135	-5,691
Participant 55	N/A	N/A	N/A	N/A	N/A	N/A
Participant 42	2,280	752	336	56	1,382	226
Participant 43	2,830	440	1,146	148	1,669	172
Participant 44	3,597	-660	1,698	-589	1,983	-810
Participant 45	1,366	847	142	57	924	158
Participant 46	5,170	-75	1,261	-8	4,183	-314
Participant 47	3,173	714	1,065	123	2,416	211
Participant 48	4,156	-469	1,722	89	1,740	-244
Participant 49	2,304	664	651	132	1,708	108
Participant 50	3,710	205	1,109	-323	2,189	-30
Participant 51	7,254	-1,872	2,868	81	3,851	-1,424
Participant 52	4,004	51	909	6	2,322	-480
Participant 53	5,723	-1,269	2,023	-881	3,175	-515
Participant 54	2,509	288	427	33	1,059	17
Number of Participant Whose 10.46 Offset Exceeds "Windfall Proration"		33		41		25

## Notes

\*For the accrued benefit as of 12/31/2006, the participants are assumed to terminate on 12/31/2006 and commence benefits at age 65, except for Participants 17, 41 and 55.

For Participants 17 and 41, the actual termination dates and commencements are used, since they are on or prior to 12/31/2006.

For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A".

\*\*For the benefit as of 12/31/2014, the participants are assumed to terminate on 12/31/2014 and commence benefit on 1/1/2015, except for those who have already commenced benefits.

For those who have commenced benefits, the actual commencement dates are used.

For those who have already terminated but not commenced, the commencement date is assumed to be 1/1/2015.

The benefit amounts shown are monthly benefits.

Calculated from data input supplied by the plan sponsor and Towers Watson. See Exhibit 15 for more detail.

159. Combining different individuals (the cross-sectional study) with different benefit commencement dates (the longitudinal study), I conclude that, as opposed to the current calculation methodology where the Section 10.46 calculation is expected to be an improvement over the Section 9.6 proration calculation, there are no simple rules that can predict whether the Section 9.6 "windfall proration" calculation will be better than the Section 10.46 offset calculation for a particular participant. Whether the Section 10.46 or Section 9.6 "windfall

proration" calculation will yield the larger benefit can only be determined once the participants' commencement date is set.

160. The detailed exhibits and the assumptions used in these calculations can be found in Exhibits 12 through 15.

**V.G. Seventh Opinion: Mr. Altman's opinions are based on errors and incorrect assumptions that render them incorrect.**

161. Below I summarize my comments regarding Mr. Altman's opinions contained in his expert report.

**V. G. 1. Mr. Altman's first opinion, "The amendment implementing the provisions of Sec 10.46 without grandfathering prior benefits was an impermissible reduction in accrued benefit," is wrong.**

162. Mr. Altman is wrong. As I indicate in my Second Opinion, Section 10.46 is a make-whole provision. And, as I indicate in my Third Opinion, benefits under Section 10.46 are an improvement over the benefits under Section 9.6 and therefore Section 10.46 is not a benefit reduction.

163. Mr. Altman presents a hypothetical in an attempt to prove his point, but his hypothetical is based on a severely flawed application of the plan provisions. First, he posits an overstated pension under Section 9.6. His hypothetical hinges on double-counting service associated with Mr. Johnston's first period of Dow employment. The interpretation would result in a windfall to Mr. Johnston and a violation of the non-duplication provision in the plan.

164. Mr. Altman's hypothetical example, when corrected to reflect the appropriate methodology, should be recalculated as follows:

- a. Mr. Altman calculates a full service benefit to be used under Section 9.6 equal to \$3,797. He then multiplies by a ratio of service of 22.48/32 to get an inflated benefit of \$2,667.
- b. When the double counting of the first period of service is removed, the proper Section 9.6 benefit is \$732 ( $\$3,797 \times 6.17/32$ ).
- c. Mr. Johnston's DDE benefit is \$1,497, and thus he would receive \$2,229 ( $\$732 + \$1,497$ ) from the two plans, before the Section 10.46 benefit is considered.
- d. Under Section 10.46, he receives his full service pension, \$3,797, less the DDE benefit, \$1,497, which is a net pension of \$2,300 from the Dow plan.

Thus, the Dow benefit has increased from \$732 to \$2,300, demonstrating the improvement.

- e. Further, note that his combined pensions across the two plans equal his targeted full career Dow benefit ( $\$2,300 + \$1,497 = \$3,797$ ). Under Mr. Altman's approach, the sum would be in excess of a full career Dow benefit ( $\$2,667 + \$1,497 = \$4,164$ ).

In summary, Mr. Altman creates the cutback only by first double counting the first period of Dow service. As discussed extensively in this report, that is a flawed interpretation of the Dow plan provisions.

**V. G. 2. Mr. Altman Second Opinion, "Amendment implementing the provisions of Sec 10.46 reduced the future accrual rate of Class Members under the Plan," is wrong.**

- 165. First, as shown above in paragraph 117, Section 10.46 increased benefits under the plan, meaning its addition did not reduce the future rate of benefit accrual.
- 166. Again, Mr. Altman's conclusion is only reached by first positing an overstated pension under Section 9.6.
- 167. Second, if Mr. Altman's starting point were corrected to remove the double counting of service, following Mr. Altman's logic, the addition of Section 10.46 increases the amount of benefit accrued between the point of the plan change and retirement.

**V. G. 3. Mr. Altman's Third Opinion, "Provision under Section 10.46 that approximates Average Annual Compensation was improperly applied," is wrong.**

- 168. Mr. Altman's approach requires disregarding explicit plan terms. As discussed above in paragraphs 102 to 104 above, it is my opinion the .925 factor under Section 10.46 was applied exactly in accordance with the plan terms. As the .925 factor is hardcoded into the plan, Mr. Altman's position would violate explicit plan language.
- 169. Mr. Altman also asserts that the .925 factor required under Section 10.46 created a cutback, since Section 9.6 did not contain the .925 explicitly. This is an incorrect approach to evaluating the potential for any cutback. A proper evaluation would compare the benefit under Section 10.46 to the benefit under Section 9.6, not individual components of the calculations leading to those benefits. And, as demonstrated above, the benefit under Section 10.46 was an improvement, not a cutback, relative to the benefit under Section 9.6.

170. Additionally, Mr. Altman overlooks the fact that the non-decreasing accrued benefit provisions of Sections 4.1 (d) and 4.2(d) also prevented the accrued benefit from going down due to this or any other plan provisions.

171. Finally, Mr. Altman ignores the fact that the .925 factor was part of the plan's provisions for calculating Average Annual Compensation for purposes of the Grandfathered Formula Benefit even before Section 10.46 was added to the plan. Thus, including it in Section 10.46 did not reduce benefits, it merely confirmed the application of existing plan provisions to the former DDE employees.

**V. G. 4. Mr. Altman's Fourth Opinion, "The Plan was not amended at the time of the 1997 transfer to indicate that benefits transferred to the DDE plan would never be credited under the Dow plan" is irrelevant.**

172. Dow and DuPont created the DDE joint venture by mutual agreement.<sup>23</sup> The direction to execute a 414(l) asset and benefit transfer from Dow to DDE was clear. The plan administrator executed the transfer, properly moving Mr. Johnston's benefit and associated assets from Dow to DDE. As such, the credited service for benefit accrual purposes for this period transferred from Dow to DDE.

173. There was no need to change Section 9.6 to clarify that credited service for benefit accrual purposes excludes service properly transferred to DDE. To continue to count such service that had been transferred would create a host of problems within the Dow plan, including a duplication of benefits and an inappropriate use of plan assets (in the sense that assets would have been sent outside the plan without having settled plan obligations). Figure 8 appends Mr. Altman's flawed theory about the first Dow service to what I have previously shown as Figure 4.

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<sup>23</sup> Human Resources Matters (DOW0001060-1070, at 1065-66); Asset Transfer Letter from Mary Stone to Janet VanAlsten (DOW0001078-1099, at 1078-1080, 1099); Dow Letter from J. VanAlsten (DOW0001131-1133); Dow Letter (DOW0020538-20556, at 20538-40, 20546); Dow Letter to Johnston (DOW0004534); December 27, 2012 Appeal Denial (DOW0012894-940, at p. 17).

Figure 8

Sequence of time	What credited service is recognized for benefit accrual purposes?		Comments
	The Dow Plan	The DDE Plan	
During initial Dow employment	First Dow Service	None	
At time of first transfer (Dow to DDE)	None	First Dow Service	414(l) transfer occurs; Mr. Johnston is kept whole by the service transfer from the Dow plan to the DDE plan
During DDE employment	None	First Dow Service + DDE Service	
At time of second transfer (DDE back to Dow)	None	First Dow Service + DDE Service	No 414(l) transfer, so both the first Dow service plus the DDE service stay with the DDE plan
During second Dow employment	Second Dow Service	First Dow Service + DDE Service	The accruing Dow pension is based on only the second Dow service because the DDE pension continues to be based on the first Dow service plus the DDE service
At retirement – based on how the Dow and DDE transfer provisions work	Second Dow Service	First Dow Service + DDE Service	No loss of credited service recognition and no windfall due to double-counting of service
At retirement – under the theory proposed by Mr. Altman	First Dow Service + Second Dow Service	First Dow Service + DDE Service	Windfall due to double-counting of first Dow service

174. Further, Section 10.46 was added to the plan to very specifically address DDE transfers, and, as discussed above, to improve benefits by creating a “make-whole” provision.

**V. G. 5. Mr. Altman’s Fifth Opinion, “DDE benefit accrual was minimal or non-existent in many cases,” is wrong.**

175. As discussed above, asset and benefit transfers from one pension plan to another, as was done from Dow to DDE, are enabled under IRC 414(l), with added guidance under the associated IRS regulations. Mr. Altman suggests in his opinion that the asset transfer to DDE was not sufficient to satisfy the PBGC safe



harbor outlined in the associated regulations, merely because the discount rate, 8.5%, was too high. It appears Mr. Altman had a fundamental misunderstanding about the basis of the calculation.

176. First, the regulations provide a de minimis rule for transfers that are less than 3% of the plan's assets, as was the case with the transfer to DDE. The assets should equal the "present value of accrued benefits" using reasonable actuarial assumptions. PBGC assumptions are deemed a safe harbor, but are not mandatory.

177. More importantly, based on my review of the documents,<sup>24</sup> the transfer of assets was actually based on the greater of a present value calculated using the:

- a. "Projected Benefit Obligation" (PBO) actuarial method and an 8.5% interest rate, or
- b. "Accumulated Benefit Obligation" (ABO) actuarial method using a discount rate based on a bond immunization strategy.

The second approach was added to ensure the transfer would be "no less than the amount necessary to satisfy Section 414(l) of the Code."

178. The calculation under 414(l) calls for an ABO-type calculation, which is based on a participant's accrued benefit at the time of the measurement. PBO is similar, except that it anticipates the impact of future pay increases on the accrued benefit. Thus, for a given interest rate, the use of a PBO methodology will produce a number of at least the ABO methodology amount because a larger pay amount is used. While I have not reviewed the calculation of the 414(l) asset and benefit transfer amount myself, it is very clear to me that Mr. Altman's attempt to adjust for the discount rate, without considering the offsetting effects of the PBO vs. ABO methodology, results in a flawed conclusion.

179. At the time of the transfer in the mid-1990s, the level of interest rates was much higher, and 8.5% was, in my experience, very typical for an assumption about the expected long-term investment return on plan assets.

180. Mr. Altman then continues in this opinion to suggest accruals at DDE were minimal. At the time of the transfer to DDE, the plan added, voluntarily, an extra layer of protection for participants. The value of their benefit at the time of transfer was determined (the transfer amount noted at the start of this section), and that amount with interest at 8% became a minimum benefit when the participants left DDE. The addition of this minimum benefit was not required, but was put in mainly to protect the early retirement benefits of some participants. To the extent this minimum benefit actually was the winning benefit at times while at DDE, that is indication of the value of the added

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<sup>24</sup> See, e.g., Human Resources Matters (DOW0001060-1070, at 1065-66).

protection provided to transferred participants.

181. In addition, even if I were to accept the premise (which I do not) that the interest rate was too high and, therefore, this DDE minimum was too low, Mr. Johnston and others like him are kept effectively in the same net position. The Section 10.46 provides a full service Dow benefit less the DDE offset. To the extent the DDE offset changes, the Dow benefit adjusts so that the total remains a full service Dow benefit.

**V. G. 6. Mr. Altman's Sixth Opinion, "Determination of damages," Mr. Altman's determination of damages," is flawed and unreliable.**

182. My Fifth, Sixth and Seventh Opinions describe the reasons that I believe Mr. Altman's determination of damages is severely flawed and unreliable.

**VI. CONCLUSION**

183. The opinions set forth above are based on the information currently available to me along with my professional training and experience. At 5:48 p.m. on the date of this report, I received revised Altman Exhibit I purporting to correct the calculation for John Wilson. I have not yet had the opportunity to evaluate or adjust my calculations, which may change based on this new information. Other new or additional information could also cause me to alter, amend or supplement these opinions.

Executed on the 29<sup>th</sup> day of June, 2015.

A handwritten signature in black ink, appearing to read "Thomas S. Terry". The signature is fluid and cursive, with a long horizontal stroke at the end.

Thomas S. Terry



**Exhibit 1****Independent Analysis of Mr. Johnston's Benefit as of His Benefit Commencement Date**

## Demographic Information and Employment History

1. Date of Birth	February 21, 1959
2. Date of Hire	January 7, 1980
3. Employment Transfer From Dow to DDE	March 31, 1996
4. Employment Transfer From DDE Back to Dow	July 1, 2005
5. Date of Retirement	September 30, 2011
6. Date of Benefit Commencement	October 1, 2011

## Grandfathered Formula Benefit

7. Compensation Used for the Grandfathered Benefit (Monthly) <sup>1</sup>	\$9,882
8. Early Retirement Factor <sup>2</sup>	1.0000
9. Service Used for the Grandfathered Benefit (as of 12/31/2005)	26.0
10. Monthly Grandfathered Gross Benefit (= 1.6% x (7) x (8) x (9))	\$4,111
11. Compensation Used in the Benefit Offset (Monthly) <sup>3</sup>	\$7,217
12. Social Security Reduction Factor <sup>4</sup>	0.3528
13. Social Security Offset Factor <sup>5</sup>	0.69%
14. Monthly Grandfathered Offset (= (9) x (11) x (12) x (13))	\$457
15. Monthly Grandfathered Benefit (= (10) - (14))	\$3,654

## Current Formula Benefit

16. Final 3-year Average Compensation (Monthly) <sup>6</sup>	\$12,208
17. Social Security Wage Base (Monthly) <sup>7</sup>	\$8,873
18. Basic Annual Accruals Excluding Transitional Accruals <sup>8</sup>	253.3%
19. Transitional Accruals <sup>9</sup>	43.3%
20. Supplemental Annual Accruals <sup>10</sup>	74.6%
21. Account at Termination Date (= ((16) x ((18) + (19)) + ((16) - (17)) x (20))	\$464,374
22. Benefit Conversion Factor <sup>11</sup>	11.1
23. Monthly Current Formula Benefit (= (21) / ((22) * 12)	\$3,486

## DDE Offset

24. DDE Offset at Age 65 <sup>12</sup>	\$3,949
25. Early Retirement Factor <sup>13</sup>	0.3792
26. DDE Offset at Retirement (= (24) x (25))	\$1,497

## Final Dow Benefit

27. Monthly All-Service Dow Benefit (= max ((15), (23)))	\$3,654
28. Monthly DDE Offset (= (26))	\$1,497
29. Monthly Dow Benefit at Retirement (= (27) - (28))	\$2,157

Based on data provided by plan sponsor and Towers Watson. See Exhibit VI for details.

## Notes

1. Compensation used for the grandfathered benefit is 0.925 x (2005 base pay + 2005 target bonus).
2. The early retirement factor is 1 minus 0.5% times the number of months the participant needs to reach age 60 or 85 points.
3. The offset compensation is the smaller of \$7,217 or (0.925 x 2005 base pay).
4. Social Security reduction is 0.555% for each month up to 60 months that the commencement age precedes the Social Security Normal Retirement Age plus 0.278% times the number of months in excess of 60.  
The Social Security Reduction Factor is 1 minus the Social Security reduction. The Social Security Normal Retirement Age is rounded up to the nearest whole age.
5. The Social Security Offset Factor depends on the ratio of Offset Compensation (item (11)) to the participant's Covered Compensation, in accordance with plan provision 4.1(b)(i)(B).
6. The compensation used for the current formula benefit is the average of the last three years of compensation, including base pay and target bonus. The last year of compensation is annualized if it is a partial year.
7. The Social Security Wage Base used for the current formula benefit is the average of the last three years of the Social Security Wage Base, prorated for partial years.
8. The Basic Annual Accruals range from 4% to 18% per year depending on age, up to 425%, as indicated in the Dow Pension Plan document, Article I, Definitions, "Basic Annual Accruals".
9. Transitional Accruals are available to those hired prior to age 30 with at least 10 years of service as of January 1, 1996. The amount can be found in Dow Pension Plan document, Article I, Definitions, "Minimum Transition Annual Accruals".
10. The Supplemental Annual Accruals range from 1% to 4% depending on age, as indicated in the Dow Pension Plan document, Article I, Definitions, "Supplemental Annual Accruals".
11. The Benefit Conversion Factor for the current formula benefit is an age-based schedule, as indicated in Dow's plan document, Article I, Definitions, "Benefit Conversion Factor". The factor for age 53 is 11.1.
12. The DDE offset is provided by the DDE plan administrator.
13. The DDE Early Retirement Reduction is 5% per year from age 65 to 55, and 1% per year below age 50. The DDE Early Retirement Factor is 1 minus the DDE Early Retirement Reduction.

## Exhibit 2

Errors in Mr. Altman's Calculation of Mr. Johnston's Accrued Benefit as of the Date of Plan Amendment <sup>1</sup>

## Demographic Information and Employment History

	Mr. Altman's Section 10.46 Calculation	Corrected Pay and Transitional Accrual Inputs	Explanation of Error(s)
1. Date of Birth	February 21, 1959	February 21, 1959	
2. Date of Hire	January 7, 1980	January 7, 1980	
3. Employment Transfer From Dow to DDE	March 31, 1996	March 31, 1996	
4. Employment Transfer From DDE Back to Dow	July 1, 2005	July 1, 2005	
5. Date of Retirement	September 30, 2011	December 31, 2006	(1)
6. Date of Benefit Commencement	March 1, 2024	March 1, 2024	

## Grandfathered Formula Benefit

7. Compensation Used for the Grandfathered Benefit (Monthly)	\$10,225	\$9,883	(2)
8. Early Retirement Factor	1.0000	1.0000	
9. Service Used for the Grandfathered Benefit (as of 12/31/2005)	26.0	26.0	
10. Monthly Grandfathered Gross Benefit (= 1.6% x (7) x (8) x (9))	\$4,253	\$4,111	
11. Compensation Used in the Benefit Offset (Monthly)	\$7,217	\$7,217	
12. Social Security Reduction Factor	0.8668	0.8668	
13. Social Security Offset Factor	0.69%	0.69%	
14. Monthly Grandfathered Offset (= (9) x (11) x (12) x (13))	\$1,122	\$1,122	
15. Monthly Grandfathered Benefit (= (10) - (14))	\$3,131	\$2,989	

## Current Formula Benefit

16. Final 3-year Average Compensation (Monthly)	\$10,642	\$10,325	(3)
17. Social Security Wage Base (Monthly)	\$8,767	\$7,558	
18. Basic Annual Accruals Excluding Transitional Accruals	255.0%	183.2%	(4)
19. Transitional Accruals	0.0%	16.8%	(5)
20. Supplemental Annual Accruals	75.0%	55.4%	(4)
21. Account at Termination Date (= ((16) x ((18) + (19)) + ((16) - (17)) x (20))	\$342,525	\$266,193	
22. Interest to Age 65	2.6170	3.7478	
23. Account at Age 65 (= (21) x (22))	\$896,374	\$997,633	
24. Benefit Conversion Factor	9.2	9.2	
25. Monthly Current Formula Benefit (= (23)/((24) * 12)	\$8,119	\$9,037	

## DDE Offset

26. DDE Offset at Age 65	\$3,949	\$3,949	
27. Early Retirement Factor	1.0000	1.0000	
28. DDE Offset at Retirement (= (26) x (27))	\$3,949	\$3,949	

## Final Dow Benefit

29. Monthly All Service Dow Benefits (= the greater of (15) and (25))	\$8,119	\$9,037	
30. Monthly DDE Offset (= (28))	\$3,949	\$3,949	
31. Monthly Dow Benefit at Retirement (= (29) - (30))	\$4,170	\$5,088	

<sup>1</sup> I used 12/31/2006 as the retirement date since the plan was amended for Section 10.46 in 2006.

## Explanation of Error(s)

- (1) For the accrued benefit calculation in the first opinion of Mr. Altman's report, he appears to have used Mr. Johnston's actual retirement date of 9/20/2011 to calculate the section 10.46 accrued benefit, contrary to the statement in his report. Since the plan was amended for Section 10.46 in 2006, I have calculated the accrued benefit as of December 31, 2006.
- (2) I was not able to replicate Mr. Altman's input for the compensation used in the grandfathered benefit. I used 0.925 \* (2005 base pay and 2005 target bonus) for the compensation used in the grandfathered benefit.
- (3) For the final 3-year average compensation for the current formula benefit, Mr. Altman appears to have used the average of 2009, 2010, and 2011 base pay. Target bonus appeared not to be used in Mr. Altman's pay calculation. I used 0.925 \* (2006 base pay and 2006 target bonus) for the compensation used in the current formula benefit because this benefit is calculated before Mr. Johnston has three full years of compensation from Dow.
- (4) The difference in Basic Annual Accruals and Supplemental Annual Accruals are due to different retirement date assumptions. Mr. Altman used Mr. Jonathan's actual termination date. However, since Mr. Altman's report states that the accrued benefit is as of 7/1/2005, an earlier date should be used.
- (5) Mr. Altman appears not to have calculated Transitional Accruals.

## Exhibit 3

## Errors in Mr. Altman's Calculation of Participant 18's Accrued Benefit as of the Date of Plan

Amendment <sup>1</sup>

## Demographic Information and Employment History

	Mr. Altman's Section 10.46 Calculation	Corrected Pay and Transitional Accrual Inputs	Explanation of Error(s)
1. Date of Birth	October 19, 1953	October 19, 1953	
2. Date of Hire	October 13, 1975	October 13, 1975	
3. Employment Transfer From Dow to DDE	March 31, 1996	March 31, 1996	
4. Employment Transfer From DDE Back to Dow	July 1, 2005	July 1, 2005	
5. Date of Retirement	December 31, 2008	December 31, 2006	(1)
6. Date of Benefit Commencement	November 1, 2018	November 1, 2018	

## Grandfathered Formula Benefit

7. Compensation Used for the Grandfathered Benefit (Monthly)	\$8,880	\$9,118	(2)
8. Early Retirement Factor	1.0000	1.0000	
9. Service Used for the Grandfathered Benefit (as of 12/31/2005)	30.0	30.3	
10. Monthly Grandfathered Gross Benefit (= 1.6% x (7) x (8) x (9))	\$4,262	\$4,420	
11. Compensation Used in the Benefit Offset (Monthly)	\$7,217	\$7,217	
12. Social Security Reduction Factor	0.9334	0.9334	
13. Social Security Offset Factor	0.69%	0.69%	
14. Monthly Grandfathered Offset (= (9) x (11) x (12) x (13))	\$1,394	\$1,408	
15. Monthly Grandfathered Benefit (= (10) - (14))	\$2,868	\$3,012	

## Current Formula Benefit

16. Final 3-year Average Compensation (Monthly)	\$9,047	\$9,228	(3)
17. Social Security Wage Base (Monthly)	\$7,825	\$7,558	
18. Basic Annual Accruals Excluding Transitional Accruals	301.0%	258.6%	(4)
19. Transitional Accruals	0.0%	97.2%	(5)
20. Supplemental Annual Accruals	86.0%	75.9%	(6)
21. Account at Termination Date (= ((16) x ((18) + (19)) + ((16) - (17)) x (20))	\$339,415	\$409,223	
22. Interest to Age 65	2.1451	2.4861	
23. Account at Age 65 (= (21) x (22))	\$728,086	\$1,017,360	
24. Benefit Conversion Factor	9.2	9.2	
25. Monthly Current Formula Benefit (= (23)/((24) * 12)	\$6,595	\$9,215	

## DDE Offset

26. DDE Offset at Age 65	\$4,358	\$4,358	
27. Early Retirement Factor	1.0000	1.0000	
28. DDE Offset at Retirement (= (26) x (27))	\$4,358	\$4,358	

## Final Dow Benefit

29. Monthly All Service Dow Benefits (= the greater of (15) and (25))	\$6,595	\$9,215	
30. Monthly DDE Offset (= (28))	\$4,358	\$4,358	
31. Monthly Dow Benefit at Retirement (= (29) - (30))	\$2,237	\$4,857	

<sup>1</sup> I used 12/31/2006 as the retirement date since the plan was amended for Section 10.46 in 2006.

## Explanation of Error(s)

- (1) For the accrued benefit calculation in the first opinion of Mr. Altman's report, he appears to have used Participant 18's actual retirement date of 12/31/2008 to calculate the section 10.46 accrued benefit, contrary to the statement in his report. Since the plan was amended for Section 10.46 in 2006, I have calculated the accrued benefit as of December 31, 2006.
- (2) Mr. Altman's used 2005 base pay as the input for the compensation used in the grandfathered benefit. I used 0.925 \* (2005 base pay and 2005 target bonus) for the compensation used in the grandfathered benefit.
- (3) For the final 3-year average compensation for the current formula benefit, Mr. Altman appears to have used the average of 2009, 2010, and 2011 base pay. Target bonus appeared not to be used in Mr. Altman's pay calculation. I used 0.925 \* (2006 base pay and 2006 target bonus) for the compensation used in the current formula benefit because this benefit is calculated before Participant 18 has three full years of compensation from Dow.
- (4) The difference in Basic Annual Accruals and Supplemental Annual Accruals are due different retirement date assumptions. Mr. Altman used Participant 18's actual termination date. However, since Mr. Altman's report states that the accrued benefit is as of 7/1/2005, an earlier date should be used.
- (5) Mr. Altman appears not to have calculated Transitional Accruals.

## Exhibit 4

## Correction for Mr. Altman's Errors in Applying DDE Offset to Post Asset Transfer Participants

Name	BCD Age	Mr. Altman's Section 9.6 Calculation (a)	Mr. Altman's Section 10.46 Calculation (b)	Incorrect DDE Offset Appeared to be Used by Mr. Altman (c)	All-Service Benefit Appeared to be Used by Altman (d) = (b) + (c)	Correct (i.e. Prorated) DDE Offset (e)	Mr. Altman's Section 10.46 Calculation if Correct DDE Offset Were Used (f) = (d) - (e)	Mr. Altman's Difference Between 9.6 and 10.46 if Correct DDE Offset Were Used (g) = (a) - (f)
Participant 8	65.00	\$11,465	\$9,216	\$3,224	\$12,440	\$568	\$11,872	-\$407
Participant 11	55.17	1,530	431	1,581	2,011	453	1,559	-29
Participant 23	65.00	3,440	2,502	1,726	4,227	550	3,677	-236
Participant 33	65.00	2,095	580	1,975	2,555	281	2,274	-179
Participant 36	65.00	1,767	1,574	852	2,425	215	2,210	-443
Participant 38	65.00	6,557	5,805	1,580	7,385	518	6,867	-311
Participant 43	57.50	834	441	733	1,174	167	1,007	-174
Participant 53	65.00	5,734	4,191	3,535	7,726	1,102	6,624	-890

## Notes:

Mr. Altman's Section 9.6 and Section 10.46 calculations can be found on Exhibit I of his report. Using on the service information presented in Mr. Altman's Exhibit I, the DDE offset was backed into so that the service and prorated benefits were consistent with each other. The DDE offset used by Mr. Altman appears to be the amount before prorating the DDE benefit by DDE service (in column C). The DDE offset in columns (c) and (e) are provided by the DDE plan administrator in the file DDE Offset Spreadsheet, Dow0013669-91. Mr. Altman appears to have used the wrong set of DDE offset for these 8 participants.

**Exhibit 5****Mr. Altman's 10.46 Calculations Differ From What In Pay Participants Are Actually Receiving**

Name	BCD Age	Mr. Altman's Section 10.46 Calculation	Plan Administrator's Section 10.46 Calculation	Discrepancy Between Mr. Altman and Plan Administrator
Participant 3	55.58	\$1,217	\$1,763	\$546
Participant 6	50.17	1,812	3,270	1,458
Participant 10	57.42	740	2,698	1,958
Participant 11	55.17	431	1,817	1,386
Participant 17	54.17	1,121	1,804	683
Participant 18	55.17	1,341	1,738	397
Participant 20	59.75	632	600	-32
JOHNSTON, ROBERT T	52.58	2,300	2,157	-143
Participant 27	60.00	961	1,128	167
Participant 31	52.83	932	1,401	469
Participant 35	50.17	730	669	-61
Participant 40	58.33	996	1,336	340
Participant 41	53.00	0	3,437	3,437
Participant 43	57.50	441	1,841	1,400
Participant 44	59.58	1,101	1,170	69
Participant 47	59.58	1,398	2,627	1,229
Participant 48	53.17	1,406	1,497	91

**Notes:**

Mr. Altman's 10.46 calculations can be found in Exhibit I of his report.  
Plan Administrator's 10.46 calculations are provided by Towers Watson at DOW0015452-20401

## Exhibit 6

## Section 10.46 is Always An Improvement Over 9.6 As Applied By the Plan Administrator

	Monthly Accrued Benefits as of 12/31/2006*		Monthly Benefits as of 12/31/2006 Payable on 1/1/2007		Monthly Benefits as of 12/31/2014 Payable on 1/1/2015**	
	Improvement of 10.46 over 9.6	Percent Improvement of 10.46 over 9.6	Improvement of 10.46 over 9.6	Percent Improvement of 10.46 over 9.6	Improvement of 10.46 over 9.6	Percent Improvement of 10.46 over 9.6
Participant 1	\$3,116	669%	\$802	673%	\$1,071	76%
Participant 2	3,755	1197%	1,803	1345%	867	97%
Participant 3	3,032	622%	463	554%	676	74%
Participant 4	4,606	771%	803	701%	1,551	103%
Participant 5	3,267	762%	244	627%	644	118%
Participant 6	9,236	1003%	2,902	1113%	3,098	123%
Participant 7	2,902	1033%	979	989%	477	61%
Participant 8	9,225	1131%	1,139	1108%	2,450	179%
Participant 9	2,246	990%	670	1105%	729	108%
Participant 10	5,494	942%	2,549	1079%	809	49%
Participant 11	4,121	1475%	1,562	1464%	1,890	206%
Participant 12	3,167	627%	568	582%	794	74%
Participant 13	2,266	1020%	1,102	1163%	762	107%
Participant 14	5,453	1031%	1,695	801%	191	12%
Participant 15	4,401	759%	393	618%	1,079	122%
Participant 16	1,946	732%	331	672%	557	95%
Participant 17	1,606	812%	1,606	812%	1,606	812%
Participant 18	4,416	1000%	1,846	1012%	487	38%
Participant 19	4,145	825%	871	806%	1,467	110%
Participant 20	840	548%	335	440%	475	65%
Participant 21	3,324	816%	1,566	899%	1,627	99%
Participant 22	4,020	870%	1,444	1024%	1,092	84%
Johnston, Robert	4,585	913%	2,326	1224%	1,319	102%
Participant 23	4,091	1411%	1,539	1472%	1,618	209%
Participant 24	2,669	713%	388	625%	916	106%
Participant 25	3,800	900%	1,195	1011%	1,277	108%
Participant 26	1,880	465%	653	363%	1,051	56%
Participant 27	3,078	1042%	928	754%	139	15%
Participant 28	2,859	728%	654	713%	898	83%
Participant 29	6,154	828%	1,559	835%	2,194	98%
Participant 30	2,467	690%	876	565%	694	48%
Participant 31	3,203	903%	1,521	1148%	993	97%
Participant 32	5,746	876%	1,722	983%	2,009	127%
Participant 33	4,161	1043%	1,842	1024%	2,658	159%
Participant 34	6,077	806%	939	722%	1,271	93%
Participant 35	1,911	674%	390	646%	499	77%
Participant 36	2,600	585%	561	582%	901	88%
Participant 37	1,821	715%	157	606%	319	105%
Participant 38	4,385	912%	448	870%	901	142%
Participant 39	2,829	604%	825	483%	972	57%
Participant 40	2,495	926%	1,107	1022%	670	83%
Participant 41	2,908	549%	2,908	549%	2,908	549%
Participant 55	N/A	N/A	N/A	N/A	N/A	N/A
Participant 42	2,649	689%	336	593%	831	107%
Participant 43	2,828	640%	1,115	623%	1,672	96%
Participant 44	2,706	1169%	1,000	915%	505	64%
Participant 45	1,928	678%	170	573%	351	100%
Participant 46	4,564	859%	1,123	867%	2,110	120%
Participant 47	3,512	938%	1,062	845%	1,113	101%
Participant 48	3,414	1249%	1,698	1500%	1,053	134%
Participant 49	2,561	630%	668	581%	771	63%
Participant 50	3,458	758%	1,296	950%	1,129	110%
Participant 51	4,846	909%	2,737	1298%	1,527	100%
Participant 52	3,606	804%	814	799%	812	79%
Participant 53	6,560	1422%	2,441	1497%	2,603	208%
Participant 54	2,520	910%	414	877%	611	131%
Number of Participant Whose 10.46 Offset Exceeds "Windfall Proration"		55		55		55

## Notes

\*For the accrued benefit as of 12/31/2006, the participants are assumed to terminate on 12/31/2006 and commence benefit at age 65, except for Participants 17, 41, and 55.

For Participants 17 and 41, the actual termination dates and commencements are used, since they are on or prior to 12/31/2006.

For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A".

\*\*For the benefit as of 12/31/2014, the participants are assumed to terminate on 12/31/2014 and commence benefit on 1/1/2015, except for Participants 17, 41, and 55.

For Participants 17 and 41, the actual termination date is used.

For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A".

The benefit amounts shown are monthly benefits.

Calculated from data input supplied by the plan sponsor and Towers Watson. See Exhibit 15 for more detail.

## Exhibit 7

## Altman's Section 9.6 "Windfall Proration" Calculation Produces Varying Results By Participant

	Monthly Accrued Benefits as of 12/31/2006*		Monthly Benefits as of 12/31/2006 and Paid on 1/1/2007		Monthly Benefits as of 12/31/2014 and Paid on 1/1/2015**	
	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"	Section 9.6 "Windfall Proration" Calculation	Improvement of 10.46 over "Windfall Proration"
Participant 1	\$3,106	\$475	\$795	\$126	\$2,680	-\$194
Participant 2	4,831	-762	2,065	-128	2,344	-581
Participant 3	2,210	1,310	378	168	1,166	231
Participant 4	4,735	468	908	9	3,145	-92
Participant 5	2,403	1,292	218	65	942	248
Participant 6	10,496	-339	2,972	190	3,227	42
Participant 7	3,838	-656	1,353	-275	2,328	-1,075
Participant 8	8,868	1,173	1,117	125	3,497	321
Participant 9	2,587	-114	898	51	1,789	-383
Participant 10	7,964	-1,888	3,228	-443	4,492	-1,734
Participant 11	3,857	544	1,473	195	1,698	118
Participant 12	2,324	1,349	449	217	1,687	183
Participant 13	2,803	-315	1,195	2	1,972	-377
Participant 14	8,071	-2,059	3,228	-1,321	6,542	-2,331
Participant 15	3,521	1,463	386	71	1,592	371
Participant 16	1,701	511	315	65	1,085	71
Participant 17	2,651	-247	2,651	-247	2,651	-247
Participant 18	6,477	-2,620	2,677	-648	2,849	-1,211
Participant 19	4,592	56	987	-8	3,051	-248
Participant 20	685	309	340	71	528	72
Participant 21	4,486	-755	1,918	-178	4,234	-265
Participant 22	5,328	-346	1,626	-41	3,469	-1,024
Johnston, Robert	5,924	-836	2,241	276	2,586	-428
Participant 23	3,443	939	1,241	403	2,107	287
Participant 24	2,323	721	385	65	1,575	206
Participant 25	4,590	-367	1,285	29	3,031	-569
Participant 26	1,214	1,071	539	294	2,486	454
Participant 27	4,728	-1,354	1,969	-918	2,641	-1,513
Participant 28	2,959	293	691	55	2,206	-222
Participant 29	6,883	15	1,729	17	5,187	-743
Participant 30	4,171	-1,345	1,807	-776	3,886	-1,746
Participant 31	3,925	-367	1,466	187	1,531	-130
Participant 32	6,258	143	1,675	222	3,824	-240
Participant 33	4,202	357	1,896	126	4,353	217
Participant 34	5,579	-1,253	962	107	2,079	170
Participant 35	1,457	738	310	141	484	186
Participant 36	2,548	496	553	105	1,317	190
Participant 37	1,188	687	121	62	348	197
Participant 38	3,846	1,020	411	88	1,333	202
Participant 39	2,687	611	979	16	2,858	-140
Participant 40	3,003	-239	1,206	9	1,857	-522
Participant 41	9,135	-5,697	9,135	-5,697	9,135	-5,697
Participant 55	N/A	N/A	N/A	N/A	N/A	N/A
Participant 42	2,280	752	336	56	1,382	226
Participant 43	2,830	440	1,146	148	1,669	172
Participant 44	3,597	-660	1,698	-596	1,983	-913
Participant 45	1,368	847	142	57	524	158
Participant 46	5,170	-75	1,261	-8	4,183	-314
Participant 47	3,173	714	1,065	123	2,416	211
Participant 48	4,156	-469	1,722	89	1,740	-244
Participant 49	2,304	664	651	132	1,708	108
Participant 50	3,710	205	1,109	323	2,189	-30
Participant 51	7,254	-1,875	2,868	81	3,851	-1,424
Participant 52	4,004	51	909	6	2,322	-480
Participant 53	5,723	1,298	2,023	581	3,175	615
Participant 54	2,509	288	427	33	1,059	17
Number of Participant Whose 10.46 Offset Exceeds "Windfall Proration"		33		41		25

## Notes

\*For the accrued benefit as of 12/31/2006, the participants are assumed to terminate on 12/31/2006 and commence benefits at age 65, except for Participants 17, 41 and 55.

For Participants 17 and 41, the actual termination dates and commencement dates are used, since they are on or prior to 12/31/2006.

For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A".

\*\*For the benefit as of 12/31/2014, the participants are assumed to terminate on 12/31/2014 and commence benefit on 1/1/2015, except for those who have already commenced benefits.

For those who have commenced benefits, the actual commencement dates are used.

For those who have already terminated but not commenced, the commencement date is assumed to be 1/1/2015.

The benefit amounts shown are monthly benefits.

Calculated from data input supplied by the plan sponsor and Towers Watson. See Exhibit 15 for more detail.

**Exhibit 8****Mr. Johnston's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"**

	Termination Date	Age	Section 10.46		Section 9.6 Proration Calculation	Section 9.6 "Windfall Proration" Calculation
			Offset	Calculation		
Johnston	12/31/06	47.83		2,516	190	2,240
Johnston	12/31/07	48.83		2,680	323	2,418
Johnston	12/31/08	49.83		2,793	455	2,563
Johnston	12/31/09	50.83		2,621	566	2,604
Johnston	12/31/10	51.83		2,424	669	2,641
Johnston	12/31/11	52.83		2,227	766	2,677
Johnston	12/31/12	53.83		2,230	903	2,854
Johnston	12/31/13	54.83		2,463	1,101	3,200
Johnston	12/31/14	55.83		2,731	1,322	3,576
Johnston	12/31/15	56.83		3,038	1,567	3,986
Johnston	12/31/16	57.83		3,436	1,855	4,469
Johnston	12/31/17	58.83		3,709	2,118	4,864
Johnston	12/31/18	59.83		3,854	2,348	5,165
Johnston	12/31/19	60.83		4,020	2,590	5,484
Johnston	12/31/20	61.83		4,131	2,818	5,764
Johnston	12/31/21	62.83		4,338	3,088	6,119
Johnston	12/31/22	63.83		4,571	3,373	6,496
Johnston	12/31/23	64.83		4,830	3,677	6,897
Johnston	12/31/24	65.83		5,083	3,914	7,165
Johnston	12/31/25	66.83		5,379	4,157	7,442

The green color represents the winning benefit.

**Notes:**

Rate of future compensation increase after 2014 is assumed to be 3%.

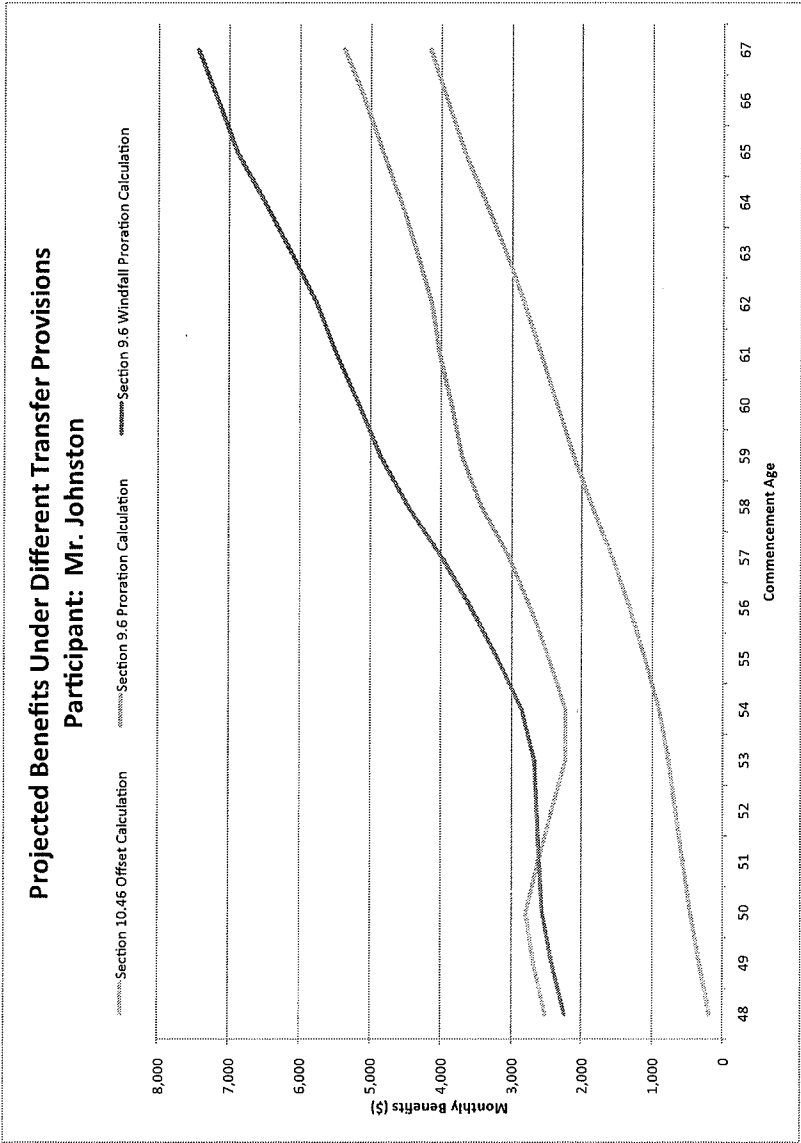
Mr. Johnston's benefit using his actual commencement date is as follows:

Johnston	9/30/11	52.58	2,157	724	2,586
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Exhibit 8 (Continued)

Illustration of Mr. Johnston's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"



Notes:  
Rate of future compensation increase after 2014 is assumed to be 3%.

## Exhibit 9

## Participant 3's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"

Termination Date	Age	Section 10.46		Section 9.6		Section 9.6	
		Offset	Calculation	Proration	Calculation	"Windfall Proration"	Calculation
Participant 3 12/31/06	45.42		546		83		378
Participant 3 12/31/07	46.42		725		160		498
Participant 3 12/31/08	47.42		852		239		601
Participant 3 12/31/09	48.42		952		319		694
Participant 3 12/31/10	49.42		1,070		407		800
Participant 3 12/31/11	50.42		1,175		505		916
Participant 3 12/31/12	51.42		1,310		631		1,077
Participant 3 12/31/13	52.42		1,455		769		1,249
Participant 3 12/31/14	53.42		1,611		919		1,432
Participant 3 12/31/15	54.42		1,810		1,094		1,647
Participant 3 12/31/16	55.42		2,015		1,281		1,871
Participant 3 12/31/17	56.42		2,252		1,490		2,121
Participant 3 12/31/18	57.42		2,507		1,715		2,388
Participant 3 12/31/19	58.42		2,821		1,978		2,701
Participant 3 12/31/20	59.42		3,126		2,245		3,013
Participant 3 12/31/21	60.42		3,503		2,558		3,380
Participant 3 12/31/22	61.42		3,917		2,902		3,780
Participant 3 12/31/23	62.42		4,313		3,244		4,173
Participant 3 12/31/24	63.42		4,805		3,649		4,641
Participant 3 12/31/25	64.42		5,313		4,074		5,127
Participant 3 12/31/26	65.42		5,637		4,377		5,456
Participant 3 12/31/27	66.42		5,867		4,596		5,679

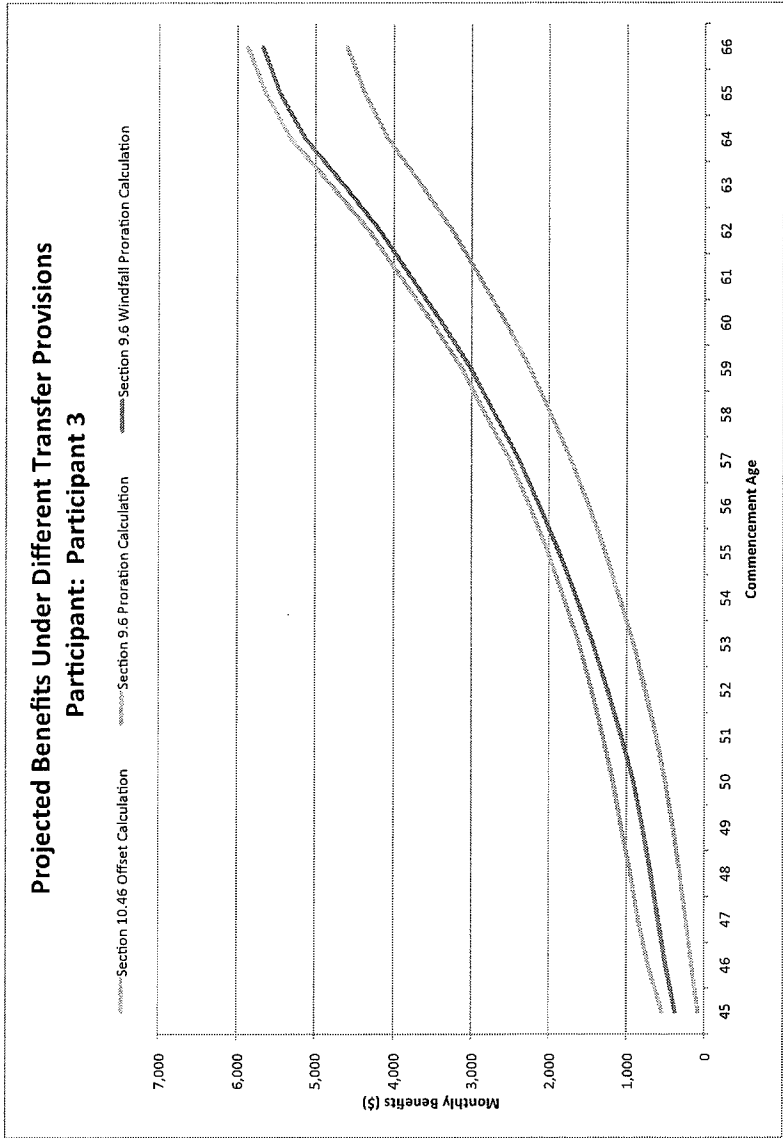
The green color represents the winning benefit.

## Notes:

Rate of future compensation increase after 2014 is assumed to be 3%..  
Participant 3's terminated on 7/31/2011 and have not commenced.

Exhibit 9 (Continued)

Illustration of Participant 3's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"



Notes:  
Rate of future compensation increase after 2014 is assumed to be 3%.

**Exhibit 10****Participant 8's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"**

Termination Date	Age	Section 10.46		Section 9.6		Section 9.6	
		Offset	Calculation	Proration	Calculation	"Windfall Proration"	Calculation
Participant 8	12/31/06		41.67		103		1,117
Participant 8	12/31/07		42.67		203		1,407
Participant 8	12/31/08		43.67		326		1,703
Participant 8	12/31/09		44.67		468		2,007
Participant 8	12/31/10		45.67		618		2,283
Participant 8	12/31/11		46.67		773		2,534
Participant 8	12/31/12		47.67		948		2,820
Participant 8	12/31/13		48.67		1,144		3,137
Participant 8	12/31/14		49.67		1,367		3,497
Participant 8	12/31/15		50.67		1,628		3,922
Participant 8	12/31/16		51.67		1,921		4,393
Participant 8	12/31/17		52.67		2,241		4,894
Participant 8	12/31/18		53.67		2,613		5,477
Participant 8	12/31/19		54.67		2,995		6,051
Participant 8	12/31/20		55.67		3,423		6,691
Participant 8	12/31/21		56.67		3,894		7,386
Participant 8	12/31/22		57.67		4,446		8,206
Participant 8	12/31/23		58.67		5,003		9,006
Participant 8	12/31/24		59.67		5,660		9,956
Participant 8	12/31/25		60.67		6,379		10,984
Participant 8	12/31/26		61.67		7,092		11,974
Participant 8	12/31/27		62.67		7,940		13,164
Participant 8	12/31/28		63.67		8,554		13,941
Participant 8	12/31/29		64.67		9,203		14,763
Participant 8	12/31/30		65.67		9,680		15,299
Participant 8	12/31/31		66.67		10,172		15,853

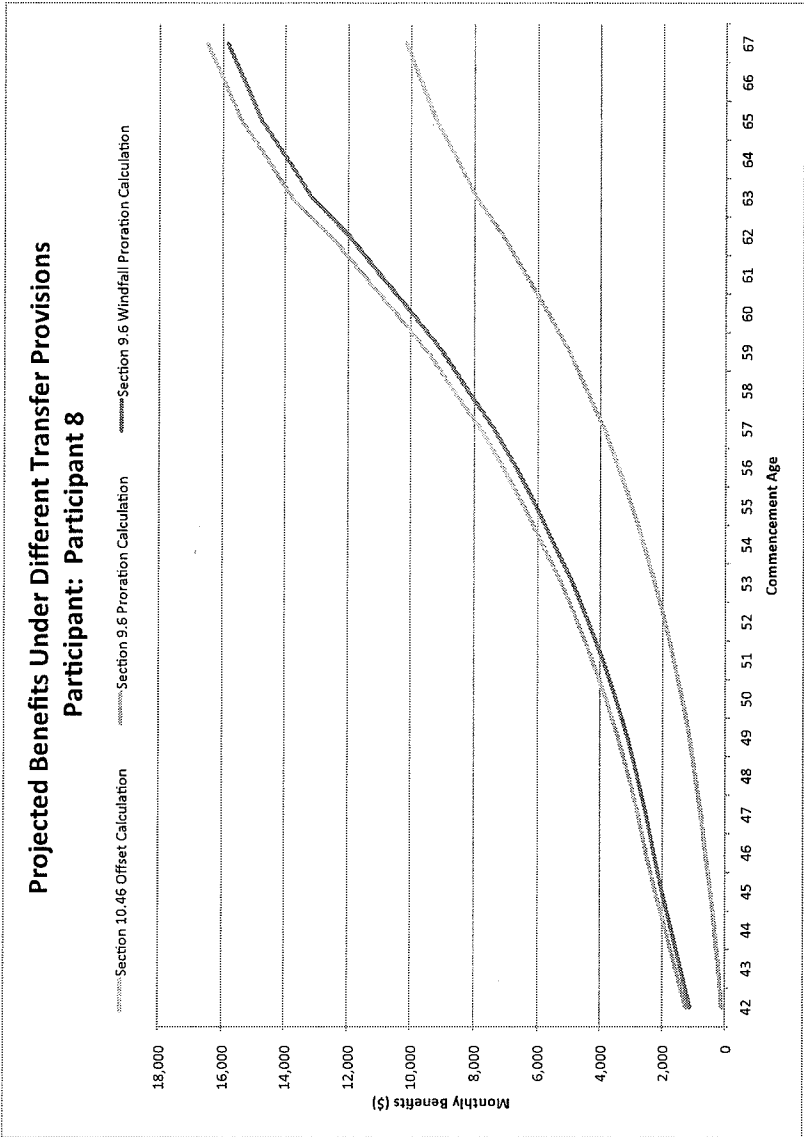
The green color represents the winning benefit.

**Notes:**

Rate of future compensation increase after 2014 is assumed to be 3%.

Exhibit 10 (Continued)

Illustration of Participant 8's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"



Notes:  
Rate of future compensation increase after 2014 is assumed to be 3%.

## Exhibit 11

## Participant 49's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"

Participant 49	Termination Date	Age	Section 10.46		Section 9.6	Section 9.6
			Offset	Calculation	Proration	"Windfall Proration" Calculation
Participant 49	12/31/06	44.92		1,432	136	1,109
Participant 49	12/31/07	45.92		1,544	233	1,228
Participant 49	12/31/08	46.92		1,655	332	1,348
Participant 49	12/31/09	47.92		1,767	435	1,469
Participant 49	12/31/10	48.92		1,878	540	1,592
Participant 49	12/31/11	49.92		1,939	636	1,683
Participant 49	12/31/12	50.92		1,817	707	1,716
Participant 49	12/31/13	51.92		1,889	834	1,884
Participant 49	12/31/14	52.92		2,159	1,030	2,189
Participant 49	12/31/15	53.92		2,501	1,264	2,552
Participant 49	12/31/16	54.92		2,912	1,538	2,969
Participant 49	12/31/17	55.92		3,229	1,793	3,327
Participant 49	12/31/18	56.92		3,575	2,070	3,711
Participant 49	12/31/19	57.92		4,005	2,395	4,163
Participant 49	12/31/20	58.92		4,420	2,727	4,609
Participant 49	12/31/21	59.92		4,937	3,117	5,138
Participant 49	12/31/22	60.92		5,508	3,545	5,712
Participant 49	12/31/23	61.92		5,857	3,881	6,125
Participant 49	12/31/24	62.92		6,163	4,203	6,509
Participant 49	12/31/25	63.92		6,497	4,545	6,917
Participant 49	12/31/26	64.92		6,861	4,908	7,351
Participant 49	12/31/27	65.92		7,160	5,179	7,642
Participant 49	12/31/28	66.92		7,479	5,458	7,943

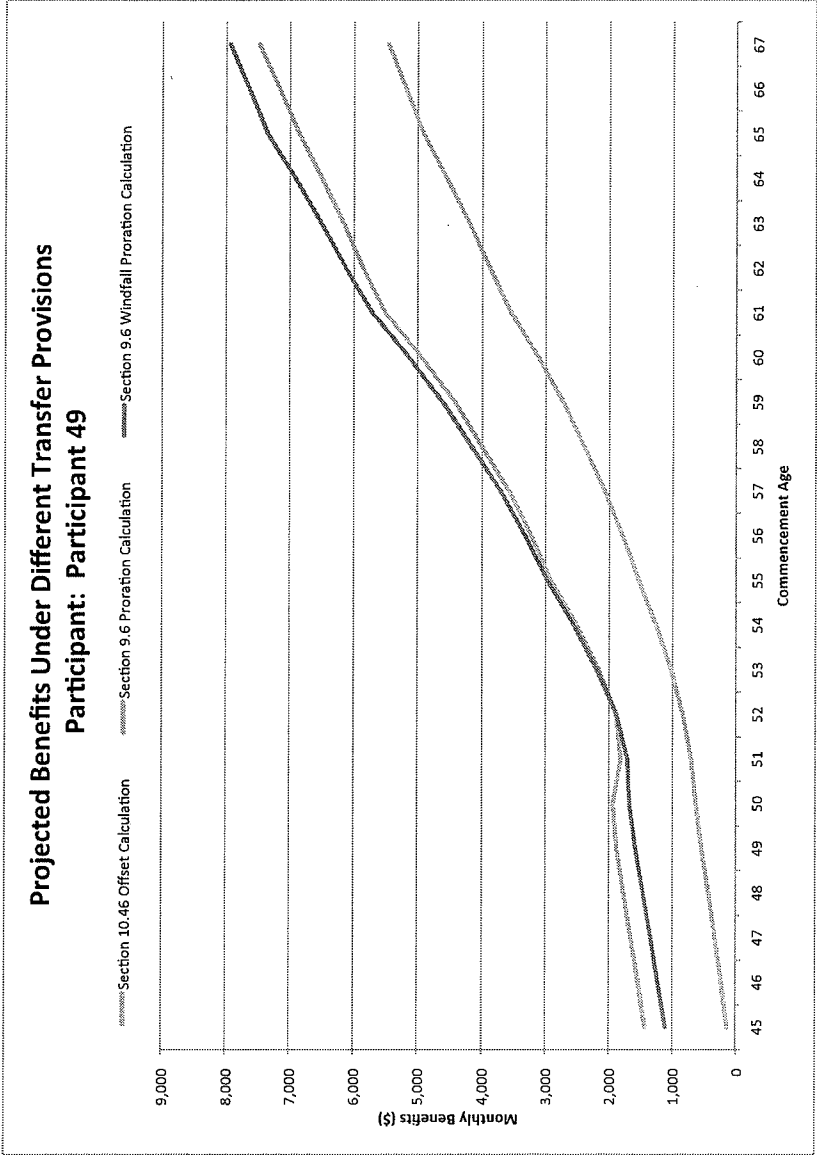
The green color represents the winning benefit.

## Notes:

Rate of future compensation increase after 2014 is assumed to be 3%.

Exhibit 11 (Continued)

Illustration of Participant 49's Benefits Under Section 10.46 and 9.6, as Applied by Plan Administrator Versus Mr. Altman's Section 9.6 "Windfall Proration"



Notes:  
Rate of future compensation increase after 2014 is assumed to be 3%.

## Exhibit 12

## Section 16.46 and Section 9.8 Benefits For All Proposed Class Members Assuming 12/31/2006 Termination And Age 65 Commencement, As Applied by Plan Administrator

Participant	DOB	DOY	Termination Date	Age at Termination	Age at Commencement	Pre-DBE (A)	DBE (B)	DBE (C)	DBE (D)	DBE (E)	DBE (F)	DBE (G)	DBE (H)	DBE (I)	DBE (J)	DBE (K)	DBE (L)	DBE (M)	DBE (N)	DBE (O)	DBE (P)	DBE (Q)	DBE (R)	DBE (S)	DBE (T)	DBE (U)	DBE (V)	DBE (W)	DBE (X)	DBE (Y)	DBE (Z)	DBE (AA)	DBE (AB)	DBE (AC)	DBE (AD)	DBE (AE)	DBE (AF)	DBE (AG)	DBE (AH)	DBE (AI)	DBE (AJ)	DBE (AK)	DBE (AL)	DBE (AM)	DBE (AN)	DBE (AO)	DBE (AP)	DBE (AQ)	DBE (AR)	DBE (AS)	DBE (AT)	DBE (AU)	DBE (AV)	DBE (AW)	DBE (AX)	DBE (AY)	DBE (AZ)	DBE (BA)	DBE (BB)	DBE (BC)	DBE (BD)	DBE (BE)	DBE (BF)	DBE (BG)	DBE (BH)	DBE (BI)	DBE (BJ)	DBE (BK)	DBE (BL)	DBE (BM)	DBE (BN)	DBE (BO)	DBE (BP)	DBE (BQ)	DBE (BR)	DBE (BS)	DBE (BT)	DBE (BU)	DBE (BV)	DBE (BW)	DBE (BX)	DBE (BY)	DBE (BZ)	DBE (CA)	DBE (CB)	DBE (CC)	DBE (CD)	DBE (CE)	DBE (CF)	DBE (CG)	DBE (CH)	DBE (CI)	DBE (CJ)	DBE (CK)	DBE (CL)	DBE (CM)	DBE (CN)	DBE (CO)	DBE (CP)	DBE (CQ)	DBE (CR)	DBE (CS)	DBE (CT)	DBE (CU)	DBE (CV)	DBE (CW)	DBE (CX)	DBE (CY)	DBE (CZ)	DBE (DA)	DBE (DB)	DBE (DC)	DBE (DD)	DBE (DE)	DBE (DF)	DBE (DG)	DBE (DH)	DBE (DI)	DBE (DJ)	DBE (DK)	DBE (DL)	DBE (DM)	DBE (DN)	DBE (DO)	DBE (DP)	DBE (DQ)	DBE (DR)	DBE (DS)	DBE (DT)	DBE (DU)	DBE (DV)	DBE (DW)	DBE (DX)	DBE (DY)	DBE (DZ)	DBE (EA)	DBE (EB)	DBE (EC)	DBE (ED)	DBE (EE)	DBE (EF)	DBE (EG)	DBE (EH)	DBE (EI)	DBE (EJ)	DBE (EK)	DBE (EL)	DBE (EM)	DBE (EN)	DBE (EO)	DBE (EP)	DBE (EQ)	DBE (ER)	DBE (ES)	DBE (ET)	DBE (EU)	DBE (EV)	DBE (EW)	DBE (EX)	DBE (EY)	DBE (EZ)	DBE (FA)	DBE (FB)	DBE (FC)	DBE (FD)	DBE (FE)	DBE (FF)	DBE (FG)	DBE (FH)	DBE (FI)	DBE (FJ)	DBE (FK)	DBE (FL)	DBE (FM)	DBE (FN)	DBE (FO)	DBE (FP)	DBE (FQ)	DBE (FR)	DBE (FS)	DBE (FT)	DBE (FU)	DBE (FV)	DBE (FW)	DBE (FX)	DBE (FY)	DBE (FZ)	DBE (GA)	DBE (GB)	DBE (GC)	DBE (GD)	DBE (GE)	DBE (GF)	DBE (GG)	DBE (GH)	DBE (GI)	DBE (GJ)	DBE (GK)	DBE (GL)	DBE (GM)	DBE (GN)	DBE (GO)	DBE (GP)	DBE (GQ)	DBE (GR)	DBE (GS)	DBE (GT)	DBE (GU)	DBE (GV)	DBE (GW)	DBE (GX)	DBE (GY)	DBE (GZ)	DBE (HA)	DBE (HB)	DBE (HC)	DBE (HD)	DBE (HE)	DBE (HF)	DBE (HG)	DBE (HH)	DBE (HI)	DBE (HJ)	DBE (HK)	DBE (HL)	DBE (HM)	DBE (HN)	DBE (HO)	DBE (HP)	DBE (HQ)	DBE (HR)	DBE (HS)	DBE (HT)	DBE (HU)	DBE (HV)	DBE (HW)	DBE (HX)	DBE (HY)	DBE (HZ)	DBE (IA)	DBE (IB)	DBE (IC)	DBE (ID)	DBE (IE)	DBE (IF)	DBE (IG)	DBE (IH)	DBE (II)	DBE (IJ)	DBE (IK)	DBE (IL)	DBE (IM)	DBE (IN)	DBE (IO)	DBE (IP)	DBE (IQ)	DBE (IR)	DBE (IS)	DBE (IT)	DBE (IU)	DBE (IV)	DBE (IW)	DBE (IX)	DBE (IY)	DBE (IZ)	DBE (JA)	DBE (JB)	DBE (JC)	DBE (JD)	DBE (JE)	DBE (JF)	DBE (JG)	DBE (JH)	DBE (JI)	DBE (JJ)	DBE (JK)	DBE (JL)	DBE (JM)	DBE (JN)	DBE (JO)	DBE (JP)	DBE (JQ)	DBE (JR)	DBE (JS)	DBE (JT)	DBE (JU)	DBE (JV)	DBE (JW)	DBE (JX)	DBE (JY)	DBE (JZ)	DBE (KA)	DBE (KB)	DBE (KC)	DBE (KD)	DBE (KE)	DBE (KF)	DBE (KG)	DBE (KH)	DBE (KI)	DBE (KJ)	DBE (KK)	DBE (KL)	DBE (KM)	DBE (KN)	DBE (KO)	DBE (KP)	DBE (KQ)	DBE (KR)	DBE (KS)	DBE (KT)	DBE (KU)	DBE (KV)	DBE (KW)	DBE (KX)	DBE (KY)	DBE (KZ)	DBE (LA)	DBE (LB)	DBE (LC)	DBE (LD)	DBE (LE)	DBE (LF)	DBE (LG)	DBE (LH)	DBE (LI)	DBE (LJ)	DBE (LK)	DBE (LL)	DBE (LM)	DBE (LN)	DBE (LO)	DBE (LP)	DBE (LQ)	DBE (LR)	DBE (LS)	DBE (LT)	DBE (LU)	DBE (LV)	DBE (LW)	DBE (LX)	DBE (LY)	DBE (LZ)	DBE (MA)	DBE (MB)	DBE (MC)	DBE (MD)	DBE (ME)	DBE (MF)	DBE (MG)	DBE (MH)	DBE (MI)	DBE (MJ)	DBE (MK)	DBE (ML)	DBE (MN)	DBE (MO)	DBE (MP)	DBE (MQ)	DBE (MR)	DBE (MS)	DBE (MT)	DBE (MU)	DBE (MV)	DBE (MW)	DBE (MX)	DBE (MY)	DBE (MZ)	DBE (NA)	DBE (NB)	DBE (NC)	DBE (ND)	DBE (NE)	DBE (NF)	DBE (NG)	DBE (NH)	DBE (NI)	DBE (NJ)	DBE (NK)	DBE (NL)	DBE (NM)	DBE (NN)	DBE (NO)	DBE (NP)	DBE (NQ)	DBE (NR)	DBE (NS)	DBE (NT)	DBE (NU)	DBE (NV)	DBE (NW)	DBE (NX)	DBE (NY)	DBE (NZ)	DBE (OA)	DBE (OB)	DBE (OC)	DBE (OD)	DBE (OE)	DBE (OF)	DBE (OG)	DBE (OH)	DBE (OI)	DBE (OJ)	DBE (OK)	DBE (OL)	DBE (OM)	DBE (ON)	DBE (OO)	DBE (OP)	DBE (OQ)	DBE (OR)	DBE (OS)	DBE (OT)	DBE (OU)	DBE (OV)	DBE (OW)	DBE (OX)	DBE (OY)	DBE (OZ)	DBE (PA)	DBE (PB)	DBE (PC)	DBE (PD)	DBE (PE)	DBE (PF)	DBE (PG)	DBE (PH)	DBE (PI)	DBE (PJ)	DBE (PK)	DBE (PL)	DBE (PM)	DBE (PN)	DBE (PO)	DBE (PP)	DBE (PQ)	DBE (PR)	DBE (PS)	DBE (PT)	DBE (PU)	DBE (PV)	DBE (PW)	DBE (PX)	DBE (PY)	DBE (PZ)	DBE (QA)	DBE (QB)	DBE (QC)	DBE (QD)	DBE (QE)	DBE (QF)	DBE (QG)	DBE (QH)	DBE (QI)	DBE (QJ)	DBE (QK)	DBE (QL)	DBE (QM)	DBE (QN)	DBE (QO)	DBE (QP)	DBE (QQ)	DBE (QR)	DBE (QS)	DBE (QT)	DBE (QU)	DBE (QV)	DBE (QW)	DBE (QX)	DBE (QY)	DBE (QZ)	DBE (RA)	DBE (RB)	DBE (RC)	DBE (RD)	DBE (RE)	DBE (RF)	DBE (RG)	DBE (RH)	DBE (RI)	DBE (RJ)	DBE (RK)	DBE (RL)	DBE (RM)	DBE (RN)	DBE (RO)	DBE (RP)	DBE (RQ)	DBE (RR)	DBE (RS)	DBE (RT)	DBE (RU)	DBE (RV)	DBE (RW)	DBE (RX)	DBE (RY)	DBE (RZ)	DBE (SA)	DBE (SB)	DBE (SC)	DBE (SD)	DBE (SE)	DBE (SF)	DBE (SG)	DBE (SH)	DBE (SI)	DBE (SJ)	DBE (SK)	DBE (SL)	DBE (SM)	DBE (SN)	DBE (SO)	DBE (SP)	DBE (SQ)	DBE (SR)	DBE (SS)	DBE (ST)	DBE (SU)	DBE (SV)	DBE (SW)	DBE (SX)	DBE (SY)	DBE (SZ)	DBE (TA)	DBE (TB)	DBE (TC)	DBE (TD)	DBE (TE)	DBE (TF)	DBE (TG)	DBE (TH)	DBE (TI)	DBE (TJ)	DBE (TK)	DBE (TL)	DBE (TM)	DBE (TN)	DBE (TO)	DBE (TP)	DBE (TQ)	DBE (TR)	DBE (TS)	DBE (TT)	DBE (TU)	DBE (TV)	DBE (TW)	DBE (TX)	DBE (TY)	DBE (TZ)	DBE (UA)	DBE (UB)	DBE (UC)	DBE (UD)	DBE (UE)	DBE (UF)	DBE (UG)	DBE (UH)	DBE (UI)	DBE (UJ)	DBE (UK)	DBE (UL)	DBE (UM)	DBE (UN)	DBE (UO)	DBE (UP)	DBE (UQ)	DBE (UR)	DBE (US)	DBE (UT)	DBE (UU)	DBE (UV)	DBE (UW)	DBE (UX)	DBE (UY)	DBE (UZ)	DBE (VA)	DBE (VB)	DBE (VC)	DBE (VD)	DBE (VE)	DBE (VF)	DBE (VG)	DBE (VH)	DBE (VI)	DBE (VJ)	DBE (VK)	DBE (VL)	DBE (VM)	DBE (VN)	DBE (VO)	DBE (VP)	DBE (VQ)	DBE (VR)	DBE (VS)	DBE (VT)	DBE (VU)	DBE (VV)	DBE (VW)	DBE (VX)	DBE (VY)	DBE (VZ)	DBE (WA)	DBE (WB)	DBE (WC)	DBE (WD)	DBE (WE)	DBE (WF)	DBE (WG)	DBE (WH)	DBE (WI)	DBE (WJ)	DBE (WK)	DBE (WL)	DBE (WM)	DBE (WN)	DBE (WO)	DBE (WP)	DBE (WQ)	DBE (WR)	DBE (WS)	DBE (WT)	DBE (WU)	DBE (WV)	DBE (WW)	DBE (WX)	DBE (WY)	DBE (WZ)	DBE (XA)	DBE (XB)	DBE (XC)	DBE (XD)	DBE (XE)	DBE (XF)	DBE (XG)	DBE (XH)	DBE (XI)	DBE (XJ)	DBE (XK)	DBE (XL)	DBE (XM)	DBE (XN)	DBE (XO)	DBE (XP)	DBE (XQ)	DBE (XR)	DBE (XS)	DBE (XT)	DBE (XU)	DBE (XV)	DBE (XW)	DBE (XX)	DBE (XY)	DBE (XZ)	DBE (YA)	DBE (YB)	DBE (YC)	DBE (YD)	DBE (YE)	DBE (YF)	DBE (YG)	DBE (YH)	DBE (YI)	DBE (YJ)	DBE (YK)	DBE (YL)	DBE (YM)	DBE (YN)	DBE (YO)	DBE (YP)	DBE (YQ)	DBE (YR)	DBE (YS)	DBE (YT)	DBE (YU)	DBE (YV)	DBE (YW)	DBE (YX)	DBE (YY)	DBE (YZ)	DBE (ZA)	DBE (ZB)	DBE (ZC)	DBE (ZD)	DBE (ZE)	DBE (ZF)	DBE (ZG)	DBE (ZH)	DBE (ZI)	DBE (ZJ)	DBE (ZK)	DBE (ZL)	DBE (ZM)	DBE (ZN)	DBE (ZO)	DBE (ZP)	DBE (ZQ)	DBE (ZR)	DBE (ZS)	DBE (ZT)	DBE (ZU)	DBE (ZV)	DBE (ZW)	DBE (ZX)	DBE (ZY)	DBE (ZZ)
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Notes:  
 For the assumed benefit as of 12/31/2006, the participant is assumed to terminate on 12/31/2006 and commence benefit at age 65, except for Participants 17, 41 and 55.  
 For Participants 17 and 41, the actual termination date is used.  
 For Participant 55, since he terminated 7 days after turning 65, there is no Dow benefit. His benefit is shown as "N/A".

The number in parentheses next to the benefit amount is the number of months of benefit payable.  
 For the Section 9.8 pension calculation, the rate is Post-DBE Service/Pre-DBE Service + DBE Service + Post-DBE Service.  
 The pension used for the calculation of the benefit is 0.025 \* (2005 base pay \* 2005 base pay).

The number in parentheses next to the benefit amount is the number of months of benefit payable.

Calculated from data input supplied by the plan sponsor and Towers Watson. See Exhibit 15 for more data.

\*TAE means final average earnings.

\*\*TAE means final average earnings.



**Section 10.46 and Section 9.6 Benefits For All Proposed Class Members Assuming 12/31/2005 Termination Date And 1/1/2007 Commencement, As Applied by Plan Administrator**

[illegible]

**Notes**  
For the benefit as of 12/31/2008, the participants are assumed to terminate on 12/31/2008 and commence benefit on 1/1/2009, except for Participants 17, 41 and 55.

For Participants 17 and 41, the actual elimination date is used. For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A." When the grandfathered benefit is not available or if the grandfather benefit is coming from Union Carbide, it is shown as "N/A." For the Section 5.6 calculation (all but the Dow benefit), the Dow benefit is calculated on the Dow benefit (Post-DDE Survey/Pre-DDE Survey + Post-DDE Survey). The calculation for the grandfathered benefit is:  $0.95 \times (\text{Post-DDE Survey} - \text{Pre-DDE Survey})$ .

\*"FAE" means first average earnings.  
Calculated from data input supplied by the plan sponsor and Towers Watson. See Exhibit 15 for more detail.  
The numbers may not add due to rounding.  
The benefit amounts shown are monthly benefits.  
The pension amounts are on the guaranteed minimum benefit as shown (above does not pay a cash bonus).

\*ERF\* means early retirement factor.



**Exhibit 15**

Except where needed, the calculations I present in this report reflect the (i) general plan provisions, (2) section 10.46 and 9.6 transfer provisions, data inputs based on participant characteristics, and (4) assumptions outlined in this exhibit.

The data that are used in the calculations include:

- a. Participant compensation:  
Source data  
 15 Resp to RFP 29, Dow Compensation Chart  
 16 Supp Resp to RFP 29, Dow Compensation Chart  
 Towers Calculations re Class Members, DOW0015452-20401
- b. Employment dates such as date of hire, date of transfer, date of retirement and date of benefit commencement:  
Source data  
 Miscellaneous Data re Class Members and Other Participants, DOW0022969-4063  
 Towers Calculations re Class Members, DOW0015452-20401
- c. Demographic information such as date of birth or age:  
Source data  
 Miscellaneous Data re Class Members and Other Participants, DOW0022969-4063  
 Towers Calculations re Class Members, DOW0015452-20401
- d. DDE offset benefits:  
Source data  
 Key Class Member Data - Group C 10.46(c)(1) - Group D 10.46(c)(2), DOW0013669-91

As part of my calculations, I omitted certain details such as rounding rules or ways of annualizing a partial year in the scope of my review. Any differences between Mr. Altman's report and calculations provided by Towers Watson. While some participants in this list may have QDROs and nonqualified benefits, my review is focused on how the benefits are paid from Dow and DDE. Thus my comments are limited to the general accuracy of the benefit calculations and the application of transfer provisions in Sections 10.46 and 9.6. I reviewed the total benefits the participant should receive from Dow, and have not reviewed other provisions (such as QDROs and nonqualified benefits) that may be applicable to certain participants.

Pension benefits can be impacted by Qualified Domestic Relation Orders or nonqualified plan benefit. I have reviewed the calculations of participants provided in Mr. Altman's report and calculations provided by Towers Watson. While some participants in this list may have QDROs and nonqualified benefits, my review is focused on how the benefits are paid from Dow and DDE. Thus my comments are limited to the general accuracy of the benefit calculations and the application of transfer provisions in Sections 10.46 and 9.6. I reviewed the total benefits the participant should receive from Dow, and have not reviewed other provisions (such as QDROs and nonqualified benefits) that may be applicable to certain participants.

I have applied the general plan provisions and transfer plan provisions in my calculation as follows:

- a. Grandfathered benefit: 1.6% times final average earnings times credited service minus a social security offset.  
 This benefit is "frozen" as of December 31, 2005, meaning it is calculated with service and compensation as of that date
- b. Current "DEPP" benefit: pension credits (expressed as a percentage) accumulated throughout an employee's career, times final average earning.
- c. DDE offset: pension benefit payable from the DDE pension plan as provided in DOW0013669-91.
- d. The all-service Dow benefit is the larger of the grandfathered benefit and the DEPP benefit, treating all Dow and DDE service as if it was with Dow. This effectively represents the benefit a participant would have received if he spent his entire career at Dow.
- e. Different provisions apply depending on whether the participants were transferred to DDE prior to or after July 1, 1997. For participants transferred to DDE prior to July 1, 1997, Dow effected a 414(l) assets and benefit transfer from the Dow pension plan to the DDE pension plan, and the DDE offset is based on DDE and pre-DDE Dow service. For those who transferred to DDE after July 1, 1997, benefits and associated assets remained in the Dow plan.

While I have reviewed the calculation of the grandfathered and the current DEPP benefits, I have relied upon the DDE offset that was provided by the DDE plan administrator to Dow in connection with the closure of the joint venture.

I understand that the Dow plan administrator and Mr. Altman have applied Sections 10.46 and 9.6 differently in performing benefits calculations.

Under the Dow plan administrator's approach, which I have followed in these calculations, except where specifically indicated:

- a. The benefit calculated under the offset provision in Section 10.46 is equal to the all-service Dow benefit minus the DDE offset, because the DDE benefit remains payable outside of the Dow plan.
- b. The benefit calculated under the transfer provision in Section 9.6 is equal to the all-service Dow benefit multiplied by a proration factor.  
 The numerator of the factor is the applicable post-DDE Dow credited service and the denominator is all Dow and DDE service.

I understand Mr. Altman has applied a different ratio when calculating benefits payable under Section 9.6. Under his approach, the numerator is the sum of pre-DDE Dow service and post-DDE Dow service, and the denominator is all Dow and DDE service. Where necessary, I use the label "Windfall Proration" to indicate that I have used Mr. Altman's approach as part of my calculations.

These additional notes generally apply to my calculations:

- a. For Participant 17, the actual termination date is used.
- b. For Participant 55, since he terminated 7 days after returning to Dow, there is no Dow benefit. His benefit is shown as "N/A".
- c. Participant 14 is deceased. The benefits calculated are what he would have received if he had survived to the commencement date.
- d. When the grandfathered benefit is not available or if the grandfathered benefit is coming from Union Carbide, it is shown as "N/A".
- e. For the Section 9.6 proration calculation, the ratio is (Post-DDE Service)/(Pre-DDE Service + DDE Service + Post-DDE Service)
- f. Compensation is assumed to increase by 3% annually after 2014.
- g. The benefit amounts shown are monthly benefits.
- h. The numbers may not add due to rounding.

The calculations I performed are further illustrated in Exhibit I, which further describes my calculations and shows specific formulas that I used.

I reviewed the final results for reasonableness, including comparing the results between individuals and at different retirement dates.

# **APPENDICES**

# **APPENDIX A**

Appendix A



**Thomas S. Terry**  
**Professional Biography and Qualifications**

Thomas S. Terry, MAAA, FSA, FCA, EA  
The Terry Group  
130 E. Randolph Street, Suite 2810  
Chicago, IL 60601

Cell: 312-543-5206  
E-mail: [tom.terry@terrygroup.com](mailto:tom.terry@terrygroup.com)

**Education**

Masters in Actuarial Science, Graduate School of Business Administration, University of Michigan, 1975

Bachelor of Science, Tufts University, 1973

- Summa Cum Laude
- Double major in math and physics
- Phi Beta Kappa
- Winner, N. Hobbs Knight Prize Scholarship for excellence in theoretical and practical physics

**Professional Experience**

The Terry Group, 2010 to present

- Founder and CEO

J.P. Morgan Compensation and Benefit Strategies, 2006 to 2010

- CEO of J.P. Morgan Compensation and Benefit Strategies
- J.P. Morgan acquired CCA Strategies in October 2006

CCA Strategies LLC, 1991 to 2006

- Co-founder and President
- Firm of approximately 200 professionals in ten offices across the U.S.

Towers Perrin, 1975 to 1991

- Principal and Vice President
- More than two thousand actuaries and employee benefits professionals world-wide
- Retirement Plan Practice Leader in Chicago office

**Professional Roles and Memberships**

American Academy of Actuaries (national professional association for US practicing actuaries):

- President, 2014
- Board of Directors, 2005 to 2009, 2013 to present
- Chair of Public Interest Committee, 2009 to 2012
- Member, Strategic Planning Committee, 2010
- Vice President for Pensions, 2007 to 2009
- Chair of Stock Options Task Force, 2004 to 2008
- Chair of Defined Benefit Revitalization Task Force, 2002 to 2004
- Pension Practice Council member, 2001 to 2009, 2010 to present
- MAAA, since 1981

## Appendix A



International Actuarial Association (association of world-wide actuarial associations):

- President-elect designee, for 2016 (President, 2017)
- Chair, Pensions and Employee Benefits Committee, 2015 to present

Board of Actuaries (oversight responsibility for the U.S. government's Civil Service Retirement System and the Federal Employees Retirement System):

- Board chairman, since 2013
- Board member, since 2010

Society of Actuaries (education and research):

- Vice President and board member, 2010 to 2012
- Board member, 2007 to 2010
- FSA, since 1976

Conference of Consulting Actuaries (continuing education):

- President-elect, President, 2006 to 2007
- Treasurer, 2003 to 2005
- Vice President, Pensions, 2001 to 2003
- Board member, 2001 to 2009
- Member, since 1982, FCA, since 2001

### Speeches and Panels

*Actuaries and the Public Interest*

Chicago Actuarial Association Meeting, 2014

*American Academy of Actuaries Presidential Address*

Casualty Actuarial Society Annual Meeting, 2013

*Actuaries and Sustainable Systems or "I'll Gladly Pay You Tuesday for a Hamburger Today!"*

Conference of Consulting Actuaries Annual Meeting, 2013

*Communicating Longevity Risk: Beyond the Definitions*

Liaw Huang and Thomas Terry, Presented at the Ninth International Longevity Risk and Capital Markets Solutions Conference, Beijing, China, 2013

*Professional Standards/Media Response Seminar*

Enrolled Actuaries Meeting, 2013

*Social Programs Forecast Under the 113th Congress, A Post-Election Outlook*

Audiocast, 2012

*Professional Standards/Media Response Seminar*

Conference of Consulting Actuaries Annual Meeting, 2012

*Lifetime Income*

Conference of Consulting Actuaries Annual Meeting, 2012

*Social Media Networking*

Conference of Consulting Actuaries Annual Meeting, 2012

Appendix A



*Initiatives to Encourage Lifetime Income*  
Society of Actuaries Annual Meeting, 2012

*Mortality Improvement – What's Up With That?*  
Longevity 8 Conference, Waterloo, Canada, 2012

*Social Security Financial Situation and Solutions*  
Enrolled Actuaries Meeting, 2012

*What is the Market Telling Us? Strategies for Managing DB Risks and Increasing Shareholder Value*  
Fidelity Investments Chief Financial Officers & Treasurers Forum, 2012

*What Every Actuary Should Know About Social Security Funding*  
Casualty Actuarial Society Annual Meeting, 2011

*Managing the Decumulation Phase*  
International Actuarial Association, Edinburgh, Scotland, 2011

*Financing Pensions for Public Sector Workers*  
International Actuarial Association, Edinburgh, Scotland, 2011

*Standards of Practice – Should They Be International?*  
International Actuarial Association, Edinburgh, Scotland, 2011

*Pension Trends in the U.S.*  
Association of Consulting Actuaries, London, 2011

*Pension Actuaries Who Live and Breathe ERM*  
Conference of Consulting Actuaries Annual Meeting, 2011

*Actuaries Behaving Badly? Professional and Ethical Dilemmas*  
Conference of Consulting Actuaries Annual Meeting, 2011

*Rapid Retirement Research Initiative, A New Approach to SOA Research*  
Society of Actuaries Annual Meeting, 2011

*Social Security Myths and Reality*  
Columbus Actuarial Club, 2011

*Enterprise Risk Management and Pensions*  
Conference of Consulting Actuaries Annual Meeting, 2010

*Communicating Uncertainty*  
Conference of Consulting Actuaries Annual Meeting, 2009

*Seeing the Forest for the Trees: Bringing Value Back to the Actuary-Client Relationship*  
Conference of Consulting Actuaries Annual Meeting, 2009

*Pensions in the U.S.*  
Canadian Institute of Actuaries Annual Meeting, 2008

*It's About Time: Raising the Social Security Retirement Age*  
American Academy of Actuaries Capital Hill Briefing, 2008



Appendix A



*Why Benefits?*

Western Pensions and Benefits Council Spring Meeting, 2008

*The Future is Here, So What Does That Mean?*

Enrolled Actuaries Meeting, 2007

*The Future of Actuarial Consulting*

Conference of Consulting Actuaries Annual Meeting, 2007

*Pension Plans: Turning Today's Challenges into Opportunities*

Blue Cross and Blue Shield Association Annual Benefits Conference, 2006

*Changing Our Focus: Consulting About Risk*

Society of Actuaries Spring Meeting, 2005

*Financial Risks in Retirement Systems: Plan Design*

Society of Actuaries Spring Meeting, 2005

*Pension Crises – Dangerous Opportunities: Pensions in the U.S.*

University of Waterloo Institute for Insurance and Pension Research (Toronto) 2005 Conference

*Pensions in the U.S.*

CitiStreet Benefits Symposium, 2005

*Beyond Pensions: Retirement Security in 2030*

Council on Employee Benefits Annual Spring Conference, 2005

*Stock Option Valuations for Dummies*

Conference of Consulting Actuaries Annual Meeting, 2005

*Pensions at the Crossroads*

Agricultural Fertilizer Human Resources Association Conference, 2005

*Actuarial Approaches to Determining Exercise Behavior*

E-Trade Financial, Directions, 2005

*Stock Options 101: Everything You Ever Need to Know About Stock Options*

Conference of Consulting Actuaries Annual Meeting, 2004

*Stock Options 102: Stock Option Pricing Models*

Conference of Consulting Actuaries Annual Meeting, 2004

*Is Retirement Security at a Crossroads?*

Enrolled Actuaries Meeting, 2004

*Professionalism in Today's Environment*

Conference of Consulting Actuaries Annual Meeting, 2003

*Defined Benefit Plans – If Not Now, Then When?*

Conference of Consulting Actuaries Annual Meeting, 2002

*Balancing the Interests of Plan Sponsors and Participants*

Conference of Consulting Actuaries Annual Meeting, 2001

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*The Future of Defined Benefit Plans*

Conference of Consulting Actuaries Annual Meeting, 2001

*Strategic Presentation Skills*

Conference of Consulting Actuaries Annual Meeting, 2001

*Defined Benefit Plans Are Dead – Or Are They?*

Blue Cross and Blue Shield Association Annual Benefits Conference, 2001

*Pension Consulting and Professionalism*

Conference of Consulting Actuaries Annual Meeting, 2000

*Communications and Disclosure*

Conference of Consulting Actuaries Annual Meeting, 2000

*Representing Workers' Interests*

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*Defined Benefit Programs – Now and in the Future*

Blue Cross and Blue Shield Association Annual Benefits Conference, 2000

*The New Hybrid Pension Plans – Good News or Bad?*

Conference of Consulting Actuaries Annual Meeting, 1999

*Pay Me Now or Pay Me Later – Retirement Benefits in a Lump Sum World*

Conference of Consulting Actuaries Annual Meeting, 1999

*What Did You Do To My Pension?*

Blue Cross and Blue Shield Association Annual Benefits Conference, 1999

*Defined Benefit Pension Plan Review*

Agricultural Chemical Industrial Relations Association Conference, 1998

*Washington Update*

Blue Cross and Blue Shield Association Annual Benefits Conference, 1998

*Retirement Plan Trends*

LCG & Associates Investment Conference, 1995

*Reform in the U.S. Employee Benefit System*

Harris Master Trust Client Conference, 1993

*Understanding Actuarial Valuations Required by SFAS 106*

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*FASB Statement 106 — Actuarial Implications*

Bellcore Telecommunications Industry Accounting Conference, 1991

*Funding and Tax Considerations Related to Retiree Health Benefits*

Institute for International Research, 1991

*Review of Current Retirement Plan Issues*

Metropolitan Chicago Healthcare Council, 1989

## Appendix A



*Training Session on Actuarial Valuations*  
Delivered to Audit Staff of Arthur Andersen, Chicago, 1989

*Post-employment Benefit Plan Design Issues*  
National Utilities and Telecommunications Conference, 1989

*Postretirement Benefits — FASB Exposure Draft*  
Iowa State Regulatory Conference, 1989

*Employee Benefit Policy for the '90s*  
Harris Master Trust Client Conference, 1989

*Employee Benefits Update*  
Illinois CPA Society Conference, 1988

*Funding of Deferred Compensation*  
Conference of Consulting Actuaries Annual Meeting, 1988

*The Actuarial View of Post-employment Benefits*  
National Utilities and Telecommunications Conference, 1988

*Non-qualified Benefit Plans*  
Chicago Compensation Association, 1986

*A Historical Perspective on Employee Benefits*  
Chicago Compensation Association, 1986

### **Articles and Other Media**

*Uncertain Times, Plural Rationalities and the Pension Fiduciary in Handbook of Institutional Investment and Fiduciary Duty* (edited by James P. Hawley, et al, 239-253) Liaw Huang, David Ingram, Thomas Terry, and Michael Thompson – Cambridge University Press, 2014

*The Aging of America*  
President's Message, Contingencies Magazine, September to October 2014

*A New Retirement Paradigm*  
President's Message, Contingencies Magazine, July to August 2014

*Public Confidence – What Does It Take?*  
President's Message, Contingencies Magazine, May to June 2014

*Promoting Objective Public Policy in a Partisan World*  
President's Message, Contingencies Magazine, March to April 2014

*Keeping Up with the Brits*  
President's Message, Contingencies Magazine, January to February 2014

*A Year Well Spent*  
President's Message, Contingencies Magazine, November to December 2013

*Communicating Longevity Risk – Beyond the Definitions*  
Co-authored with Liaw Huang; presented in Beijing at Longevity 9 Conference, 2013

Appendix A



*Interview as part of report on Increasing Social Security Retirement Age*  
CNN, 2010

*Fix Social Security by Increasing the Retirement Age*  
US News and World Report, 2010

*Benefit Math: With DB, 1+1=3*  
BenefitsNews.com, January 2006

*Interview as part of feature report on Retirement Security Crisis*  
CBS Evening News, June 2002

*Commentary on Actuaries Become Red-Faced Over Recorded Pension Talk*  
Wall Street Journal, 1999

*Custom Pension Software Comes Full Circle*  
Employee Benefit Plan Review, June 1997

*More Than an Accounting Rule*  
Institutional Investor, 1989

*A Pre-tax Contributory Pension Plan — Why Not?*  
Business Insurance, 1982

*Revenue Ruling 79-90: Adding 'Option Factors' to the Plan*  
National Law Journal, 1982

## **APPENDIX B**



Appendix B

**Thomas S. Terry  
Testimony in Last Four Years and Compensation**

Thomas S. Terry, MAAA, FSA, FCA, EA  
The Terry Group  
130 E. Randolph Street, Suite 2810  
Chicago, IL 60601

Cell: 312-543-5206  
E-mail: [tom.terry@terrygroup.com](mailto:tom.terry@terrygroup.com)

**Congressional Testimony**

*Testimony on Social Security's Current Benefit Expenditures, Proposed Changes to Future Benefits and the Impact Those Changes would Have on the Program, Future Beneficiaries, Workers, and the Economy*  
U.S. House of Representatives Ways and Means Committee Subcommittee on Social Security, July 2011

**Trial and Deposition Testimony**

In 2014, Mr. Terry prepared a report and was deposed as an expert in the United States Bankruptcy Court, Eastern District of Michigan, in the matter of the City of Detroit, Case No: 13-53846, for two creditors, National Public Finance Guarantee Corp. and Assured Guaranty Municipal Corp. Mr. Terry provided testimony concerning various pension-related matters affecting his clients' financial exposure. The specific contested matter was settled in August 2014.

In 2013, Mr. Terry prepared a report, was deposed, and testified at a hearing in the United States Bankruptcy Court, Eastern Division of Missouri, in the matter of Patriot Coal Corporation, Case No: 12-51502. Mr. Terry provided expert testimony regarding the reasonableness of the company's proposal regarding medical coverage for active and retired union employees, as well as the reasonableness of the establishment of a Voluntary Employee Beneficiary Association (VEBA, or 501(c)(9) trust) to provide for the union retiree benefits going forward.

**Compensation**

My project team and I have been engaged for this assignment at the hourly billing rates of the individuals assigned, plus expenses. The current hourly billing rates range from \$900 to \$350 per hour. The amount of our fees is not contingent in any way upon the opinions expressed herein or the outcome of this matter.

# **APPENDIX C**

**Appendix C: Documents Relied Upon**

Complaint, dated 1-29-2014	N/A
Dow Employees' Pension Plan, Effective 1-1-2014	DOW0009220-455
Dow Employees' Pension Plan, Effective 4-14-2010	DOW0000739-924
Dow Employees' Pension Plan, Effective 1-1-2001	DOW0009957-10142
DDE Plan, Effective 12-17-2001	DOW0025292-354
Ex. A, Defendant's Answers to 2nd Interrogatory	N/A
Supplemental Ex. A, Defendant's Answers to 2nd Interrogatory	N/A
Letter from Watson Wyatt to Dow, 11-16-1996	DOW0001100-1101
Letter from Anderson to Johnson with Appendices	DOW0012894-940
Letter from Richards to Amert re Privilege Log, 2-5-2015	N/A
Letter from Borich to Renaker re Privilege Log, 3-23-2015	N/A
Johnston's Resp. to 1st Interrogatory	N/A
Presentation re Asset Transfer, 12-12-1995	DOW00025656-70
Resp. to RFP 29, Dow Compensation Chart	N/A
Supp. Resp. to RFP 29, Dow Compensation Chart	N/A
Sample 9.6 Calculations	DOW0024359-96
Expert Report of Ian H. Altman, FSA, dated May 27, 2015	N/A
December 27, 2012 Appeal Denial	DOW0012894-940
Johnston's pension calculations	DOW002283-2297
Johnston sample 9.6 calculation	DOW0020449-20496
Towers work papers for Johnston's 10.46 calculation	DOW0020402-48
Summary and analysis of Johnston's Benefit Appeal	DOW0004454-4555
Exhibit D Benefit Calculation	DOW0003948-3953
Benefit calculation chart	DOW0005884-5912
Letter to Johnston re DDE offset	DOW0001715-1716
Email re application of .925 factor	DOW0021911-2
10.46 amendment draft with comments re application of .925 factor	DOW0025422
Further Revised DEPP Fifth Amendment	DOW0025445
Email re 738537	DOW0012822
Email re .925 factor	DOW0025196
Email re .925	DOW0022088
Q&A re Benefit Calculation	DOW0022139
7th Amendment to the Plan	DOW0009531
2015-05-11 Dep. Transcript Jendretzke - Condensed	N/A
1997 Calculation of Asset Transfer Amounts	DOW001078-96
DDE Offset Spreadsheet	DOW0013669-91
Calc-DDE-Dow-0324.XLS	DOW0022969-4063
Towers work papers - Participant 2	DOW0015452-90
Towers work papers - Participant 2	DOW0015491-572
Towers work papers - Participant 3	DOW0015573-655
Towers work papers - Participant 3	DOW0015656-702



Towers work papers - Participant 3	DOW0015703-750
Towers work papers - Participant 3	DOW0015751-784
Towers work papers - Participant 6	DOW0015785-811
Towers work papers - Participant 6	DOW0015812-73
Towers work papers - Participant 8	DOW0015874-909
Towers work papers - Participant 10	DOW0015910-52
Towers work papers - Participant 10	DOW0015953-979
Towers work papers - Participant 10	DOW0015980-6014
Towers work papers - Participant 10	DOW0016015-74
Towers work papers - Participant 11	DOW0016075-136
Towers work papers - Participant 11	DOW0016137-226
Towers work papers - Participant 11	DOW0016227-262
Towers work papers - Participant 11	DOW0016263-293
Towers work papers - Participant 13	DOW0016294-386
Towers work papers - Participant 13	DOW0016387-391
Towers work papers - Participant 13	DOW0016392-439
Towers work papers - Participant 13	DOW0016440-479
Towers work papers - Participant 14	DOW0016480-537
Towers work papers - Participant 14	DOW0016538-564
Towers work papers - Participant 14	DOW0016565-612
Towers work papers - Participant 14	DOW0016613-646
Towers work papers - Participant 16	DOW0016647-695
Towers work papers - Participant 17	DOW0016696-671
Towers work papers - Participant 18	DOW0016772-9
Towers work papers - Participant 18	DOW0016780-811
Towers work papers - Participant 18	DOW0016812-864
Towers work papers - Participant 20	DOW0016865-91
Towers work papers - Participant 20	DOW0016892-939
Towers work papers - Participant 20	DOW0016940-966
Towers work papers - Participant 21	DOW0016967-7039
Towers work papers - Participant 21	DOW0017040-107
Towers work papers - Robert Johnston	DOW0020402-48
Towers work papers - Robert Johnston	DOW0020449-96
Towers work papers - Robert Johnston	DOW0020497
Towers work papers - Participant 23	DOW0017108-82
Towers work papers - Participant 23	DOW0017183-210
Towers work papers - Participant 23	DOW0017211-76
Towers work papers - Participant 23	DOW0017277-336
Towers work papers - Participant 23	DOW0017337-86
Towers work papers - Participant 23	DOW0017387-457
Towers work papers - Participant 26	DOW0017458-601
Towers work papers - Participant 26	DOW0017602-67
Towers work papers - Participant 26	DOW0017668-702

Towers work papers - Participant 29	DOW0017703-795
Towers work papers - Participant 31	DOW0017796-845
Towers work papers - Participant 31	DOW0017846-892
Towers work papers - Participant 31	DOW0017893-920
Towers work papers - Participant 32	DOW0017921-927
Towers work papers - Participant 33	DOW0017928-82
Towers work papers - Participant 33	DOW0017983-8020
Towers work papers - Participant 33	DOW0018021-80
Towers work papers - Participant 34	DOW0018081-125
Towers work papers - Participant 34	DOW0018126-199
Towers work papers - Participant 34	DOW00182002-51
Towers work papers - Participant 35	DOW0018252-79
Towers work papers - Participant 36	DOW0018280-318
Towers work papers - Participant 36	DOW0018319-58
Towers work papers - Participant 36	DOW0018359-422
Towers work papers - Participant 36	DOW0018423-30
Towers work papers - Participant 37	DOW0018431-503
Towers work papers - Participant 37	DOW0018504-96
Towers work papers - Participant 37	DOW0018597-647
Towers work papers - Participant 37	DOW0018648-73
Towers work papers - Participant 37	DOW0018674-722
Towers work papers - Participant 38	DOW0018723-71
Towers work papers - Participant 39	DOW0018772-833
Towers work papers - Participant 39	DOW0018834-81
Towers work papers - Participant 40	DOW0018882-927
Towers work papers - Participant 41	DOW0018928-95
Towers work papers - Participant 41	DOW0018996-9023
Towers work papers - Participant 41	DOW0019024-30
Towers work papers - Participant 41	DOW0019031-111
Towers work papers - Participant 41	DOW0019112-65
Towers work papers - Participant 55	DOW0019166-75
Towers work papers - Participant 43	DOW0019176-232
Towers work papers - Participant 43	DOW0019233-301
Towers work papers - Participant 44	DOW0019302-380
Towers work papers - Participant 44	DOW0019381-404
Towers work papers - Participant 45	DOW0019405-46
Towers work papers - Participant 45	DOW0019447-79
Towers work papers - Participant 47	DOW0019480-565
Towers work papers - Participant 47	DOW0019566-617
Towers work papers - Participant 48	DOW0019618-738
Towers work papers - Participant 48	DOW0019739-55
Towers work papers - Participant 49	DOW0019756-87
Towers work papers - Participant 49	DOW0019788-801

Towers work papers - Participant 50	DOW0019802-31
Towers work papers - Participant 50	DOW0019832-909
Towers work papers - Participant 51	DOW0019910-86
Towers work papers - Participant 51	DOW0019987-996
Towers work papers - Participant 51	DOW0019997-20047
Towers work papers - Participant 53	DOW0020048-106
Towers work papers - Participant 53	DOW0020107-41
Towers work papers - Participant 53	DOW0020142-64
Towers work papers - Participant 53	DOW0020165-227
Towers work papers - Participant 53	DOW0020228-309
Towers work papers - Participant 53	DOW0020310-328
Towers work papers - Participant 53	DOW0020329-401
Dow Employees' Pension Plan Effective January 1, 2014 (Jendretzke Ex. 1)	DOW0000030-228
Dow Employees' Pension Plan, The Dow Chemical Company, Midland, Michigan 48674 (Jendretzke Ex. 2)	DOW0008325-466
Dow Employees' Pension Plan, The Dow Chemical Company, Midland, Michigan 48674 (Jendretzke Ex. 3)	DOW0009957-10142
Tenth Amendment to the Dow Employees' Pension Plan (Jendretzke Ex. 4)	DOW0009456-9639
Dow Employees' Pension Plan Effective January 1, 2009 (Jendretzke Ex. 5)	DOW0010211-384
The Dow Chemical Company Project Tempo Implementation Dated January 31, 2005 (Jendretzke Ex. 6)	DOW0022053-74
Pension Cases - Employees From DuPont Dow (Jendretzke Ex. 7)	DOW0025245-58
Dow Asset Transfer DEPP Carveout Benefits (Jendretzke Ex. 8)	DOW0024458-72
Sixth Amendment to Dow Employees' Pension Plan (Jendretzke Ex. 9)	DOW0012718-12722
Dow Asset Transfer Sample Employee (Jendretzke Ex. 10)	DOW0022026-31
Email Dated 3/18/05 (Jendretzke Ex. 11)	DOW0022890-97
Dow Chemical Calculation Summary (Jendretzke Ex. 12)	DOW0024359-96
Project and Prorate Supplemental Benefit Summary (Jendretzke Ex. 13)	DOW0024341-3
Letter (Jendretzke Ex. 14)	DOW0024336
Summary Plan Description Dated 11/1/05 (Jendretzke Ex. 15)	DOW0010687-75
Summary Plan Description For: Dow Employees' Pension Plan (DEPP) Effective May 26, 2006 (Jendretzke Ex. 16)	DOW0010776-871
Summary Plan Description For: The DEPP Component of the Dow Employees' Pension Plan (Jendretzke Ex. 17)	DOW0000350-473
Second Amendment to Dow Employees' Pension Plan (Jendretzke Ex. 18)	DOW0008199-8201
Collection of Documents (Jendretzke Ex. 19)	DOW0001098-1106

Pension Benefits	DOW0001131; DOW0001134-1137
Employees in DuPont Joint Venture	DOW0001469-1471
Email re: Dow employees 50 and older going to DDE	DOW0001126-1127
Continuity of Service Rules	DOW0001139-1143
Email re: Dow/Dupont Joint Venture	DOW0001128-1130
DuPont Dow Elastomers Service Agreement	DOW0001535-1536
DuPont Human Resources – Compensation and Benefits	DOW0001529-1534
Employee Development Center – Pension Benefits, Miguel Preto 735537	DOW0001486-1488
DuPont Dow Elastomers – Outstanding Benefits Issues and Ongoing Obligations	DOW0001144-1153
Human Resources Matters	DOW0001060-1070
Asset Transfer from Dow Employees’ Pension Plan to the DDE Joint Venture Pension Plan	DOW0001100-1101
DuPont Joint Venture DEPP Floor Benefit	DOW0001102-1104
Last Transfer of Asset	DOW0001161
Fax re: Dow	DOW0001430-1433
Email re: Retirement Issue with the Venture	DOW0015448
Email re: Transfer of assets to DDE	DOW0001466-1468
Fax re: Dow DEPP Accounts	DOW0001415-1419
Fax re: Employees and (draft) DEPP Balances	DOW0001165-1169
Email re: C&S Rules	DOW0001116-1119
Email re: DDE transfers and DEPP account balances	DOW0001113-1115
Email re: DDE asset transfer	DOW0001459-1464
Email re: DuPont/Dow Pension	DOW0001170-1172
DuPont/Dow JV Employees PA Target Amounts	DOW0001410-1411
Fax re: DDE letter to employees re DEPP account balances	DOW0001567-1570
Fax enclosing final update on DDE spreadsheet	DOW0001389-1393
Retirement Basic Member Update – Michael Garratt	DOW0001479-1481
Letter re: Dow Pension Asset Transfer to DuPont Dow Elastomers, LLC	DOW0001078-1096
Letter re: Final Asset Transfer Amount from Dow Employees’ Pension Plan to the DDE Joint Venture Pension Plan	DOW0001099
“Dow Pension Asset Transfer to DuPont Dow Elastomers LLC”	DOW0020538-20556
Email re: DDE Issue	DOW0001109-1112
Letter re: Dow Pension Asset Transfer to DuPont Dow Elastomers, LLC	DOW0001077
Email re: DDE Transfers	DOW0001097
Email re: Conference Call Background	DOW0013655-13656
Email re: Project Tempo Conference Calls	DOW0024208-10
Case #1 Employee Transferred from Dow	DOW0025244-58
Summary of DDE Benefits table	DOW0025226-30

Manual Data Requirements for WW	DOW0001054-1057
Letters to Johnston saying his pension transferred to DDE and informing him of his DDE benefit	DOW0004534
DDE Employee Reference Sheet	DOW0021900-4
Email re: DDE pension question	DOW0012814-12815
Transferees to DDE	DOW0001105-1106
DuPont Dow Elastomers Venture	DOW0001405-1407
Email re Conference Call Background	DOW0013655-13656
Email re: Project Tempo – Additional Pension Thought	DOW0024211-2
Power Point re pension benefits by WW	DOW0013628-13650
Email re: Project Tempo – Pension Options – UPDATE	DOW0021950-2
Project Tempo – Analysis of Pension Options	DOW0021955-7
Project Tempo Implementation	DOW0024065-90
Dow Asset Transfer Sample Employee	DOW0022025-22031
Email re: Tempo Implementation Call – 3/18/2005	DOW0022890-2
Project Tempo Implementation	DOW0022037-48
Summary of DDE Benefits	DOW0024726-39
Email re: DDE Early Retirement Factors	DOW0015082-15083
Email re: DDE Integration into DowPAS meeting – April 20	DOW0021835-21836
Draft amendment	DOW0025412-4
Email re: DDE Carveout Benefits	DOW0021811-3
Email re: Fifth Amendment to DEPP	DOW0025427-8
Draft amendment with internal comments re: .925	DOW0025416-20
6 <sup>th</sup> Amendment to Dow Employees' Pension Plan	DOW0009620
Draft amendment	DOW0012674-12676
Draft amendment	DOW0012718-12722
Email re: FYI	DOW0022015
Draft portion of amendment	DOW0009486-9487
PowerPoint DDE Compensation and Benefits Review	P1607-1650
DDE Letter re Benefits	DOW0001131
PowerPoint re Pension Benefits – 12/95	DOW0001132-1133
PowerPoint re Pension Benefits – 1/96	DOW0001134-1137
Memo re: DDE Compensation and Benefits Meeting	P004632-61
Printout from Administrative Record	DOW0001128-1130
Email re: DDE – Participant 26	DOW0001542-1566
2012 Form 5500	DOW0007455-7606
6/24/15 Letter from T. Renaker to S. Callahan re Altman Report	N/A
1996 Form 5500	DOW0011175-201
1996 Form 5500 Schedule P	DOW0011216-45
1996 Form 5500 Schedule SSA	DOW0011202-15
1997 Form 5500	DOW0011279-318

# **APPENDIX D**

**Appendix D: Excerpts from 2010 Dow Employees' Pension Plan ("DEPP")**

Article 1: Definitions

- 2. Accrued Benefit: DOW0003641
- 4. Annualized Compensation: DOW0003642-DOW0003643
- 7. Average Annual Compensation (HC3A): DOW0003643-DOW0003644
- 16. Company: DOW0003646-DOW0003647
- 19. Credited Service: DOW0003651
- 24. DEPP Formula: DOW0003651
- 36. Grandfathered Benefit Formula: DOW0003656

Section 4.1: Normal Retirement Benefit (DOW0003677-DOW0003678)

Section 4.10: Duplication of Benefits (DOW0003685-DOW0003686)

Section 7.1: Duties and Powers of Plan Administrators (DOW0003719)

Section 9.6: Transfers of Employees (DOW0003736-DOW0003746)

Section 10.46: Transfers from DuPont Dow Elastomers Pension and Retirement Plan (DOW0003803-DOW0003805)

## **Article I: Definitions**



## **ARTICLE I**

### **DEFINITIONS**

The following terms are used by this Plan and have specific meanings as explained below, unless a different meaning is plainly required by the context of a particular provision. A pronoun or adjective in the masculine gender includes the feminine gender, and vice versa, and the singular includes the plural, unless the context clearly indicates otherwise. The title of an officer or employee when used in this Plan document shall mean the respective officer or employee of the Company, except where otherwise indicated. The title for a Plan Administrator, Investment Fiduciary or other person or entity who is assigned responsibilities under the Plan shall mean any successor title to such position as such title may be changed from time to time.

1. **"Account Balance"** shall mean the Current Formula Benefit determined before the application of the Benefit Conversion Factor, but taking into consideration any interest increase by reason of the Participant's deferral of commencement of such benefit.
2. **"Accrued Benefit"** shall mean:

(a) *DEPP Formula*

A Participant's DEPP Formula **"Accrued Benefit"** is the Participant's Normal Retirement Benefit calculated as the greater of (i) and (ii) below, where:

- (i) is the Participant's Normal Retirement Benefit calculated using the Participant's Average Annual Compensation and his Credited Service projected to the Participant's Normal Retirement Age; multiplied by the ratio of the Participant's actual Credited Service to Credited Service projected to Normal Retirement Age (assuming full-time employment to such Normal Retirement Age); and
- (ii) is the lesser of (A) and (B) below, where:
  - (A) is the Participant's projected Account Balance at Normal Retirement Date using his Average Annual Compensation and his Credited Service projected to the Participant's Normal Retirement Age; and
  - (B) is the Participant's actual Account Balance increased at 8% interest until Normal Retirement Age with interest prorated for partial years.

The amount so determined is then divided by the Benefit Conversion Factor for Normal Retirement Age.

(b) *Flat Rate Formula*

A Participant's Flat Rate Formula **"Accrued Benefit"** is an amount determined under Section 10.37 or 10.38, as appropriate, without regard to any adjustment

thereunder, when expressed in a form that is the Actuarial Equivalent of a Life Only Annuity payable upon reaching Normal Retirement Age.

(c) *Personal Pension Account*

A Participant's Personal Pension Account "**Accrued Benefit**" is the benefit that is equal to the Participant's Life Only Annuity commencing at Normal Retirement Age that is the Actuarial Equivalent of the Participant's Personal Pension Account balance as of the Annuity Starting Date. For a Participant whose Annuity Starting Date is before Normal Retirement Age, Interest Credits shall be credited to the Participant's Personal Pension Account from the Annuity Starting Date to Normal Retirement Age using the Interest Credit Rate in effect at the Annuity Starting Date.

3. "**Actuarial Equivalent**" shall mean an equivalent value benefit computed on the basis of a specific mortality table and a specific interest rate. Unless otherwise provided in the Plan, the following mortality tables and interest rates shall be used for the purpose specified:

- (a) For determinations with respect to benefits determined under the Grandfathered Formula Benefit, the UP-1984 Mortality Table set forward one year and an 8% interest rate.
- (b) For determinations with respect to benefits based on the Personal Pension Account, the Interest Credit Rate for the Plan Year of distribution and the applicable mortality table set forth in Code section 417(e)(3).
- (c) For all other determinations, the 1983 Group Annuity Mortality Table (blended using 50% of the male and 50% of the female mortality rates to obtain a unisex table) and an 8% interest rate.

4. "**Annualized Compensation**" shall mean:

- (a) For each year before 1971, the Compensation received by the Employee.
- (b) For each calendar year from 1971 through 1975 in which an Employee was credited with at least 1/10<sup>th</sup> of a year but less than a full year of Credited Service, the Employee's Compensation divided by the Employee's fractional year of Credited Service.
- (c) For each calendar year starting with 1976 in which an Employee was credited with less than the Location Work Schedule Hours, Compensation shall be annualized as follows:
  - (i) If the year to be annualized is not the current year, the Annualized Compensation for such year is equal to the Employee's rate per hour as of the end of such year times the difference between the Location Work Schedule Hours and the Employee's Hours of Service plus the Compensation earned for such year.

- (ii) If the year to be annualized is the current year and the Employee's current status is not "terminated," then Annualized Compensation for such current year is equal to the Employee's current rate per hour times the difference between the Location Work Schedule Hours and the Employee's Hours of Service plus the Compensation earned for such year.
  - (iii) If the year to be annualized is the current year and the Employee's current status is "terminated," and:
    - (A) If the termination date is later than the last pay end date of the year, then Annualized Compensation for such year is equal to the Compensation earned for such year minus the product of the Employee's last rate per hour from two years back times the scheduled hours past the pay end date plus the Employee's current rate per hour times the difference between the Location Work Schedule Hours through the termination date and the Employee's Hours of Service through the termination date.
    - (B) If the termination date is before the last pay end date of the year, then the Annualized Compensation for such year is equal to the Employee's termination pay rate per hour times the difference between the Location Work Schedule Hours on the termination date and the Employee's Hours of Service plus the Compensation earned for such year increased by the product of the total Location Work Schedule Hours for such year minus the Location Work Schedule Hours to the termination date divided by the total Location Work Schedule Hours for such year times the Annualized Compensation from three years back.
  - (d) For each calendar year starting with 1976 in which an Employee was credited with Hours of Service equal to or greater than the Location Work Schedule Hours, the Compensation received by the Employee.
- 5. **"Annuity Starting Date"** shall mean the date on which an amount is payable under the Plan.
- 6. **"Appeals Administrator"** shall mean the person, group of persons, or entity responsible for reviewing adverse benefit determinations under the Plan, as described in DOL Reg. section 2560.503-1(h). The Dow Chemical Company Retirement Board is the Appeals Administrator, except to the extent a different person, group of persons or entity is designated by The Dow Chemical Company as the Appeals Administrator pursuant to Section 7.4 or the Appeals Administrator delegates its responsibility for deciding claims to another person, group of persons or entity pursuant to Section 7.5.
- 7. **"Average Annual Compensation" ("HC3A")** shall mean:
  - (a) Except as explained in paragraph (b) below, an Employee's Average Annual Compensation shall be the highest mean Annualized Compensation computable

for any three consecutive full calendar years during the Employee's period of Credited Service.

- (b) For purposes of making the calculations set forth in paragraph (a) above, if no Credited Service was earned in any calendar year, the Annualized Compensation for the immediately preceding calendar year shall be used as the Annualized Compensation. Provided, however, that any former Employee who does not return from an authorized leave of absence, or who returns from an authorized leave of absence but does not complete at least 500 Hours of Service upon his return, shall have his Average Annual Compensation calculated under paragraph (a) above, based upon the period of Credited Service earned before such leave.
- (c) Except as provided in paragraph (d) below, Average Annual Compensation for an Employee who has less than three consecutive full calendar years of Credited Service at the time of termination, and who is vested at the time of termination, shall be determined using such Employee's Compensation earned during his actual years of Credited Service and the amount of Annualized Compensation so determined shall be multiplied by a factor of .925.
- (d) Average Annual Compensation for an Employee who becomes an Employee due to an acquisition by the Company and has less than three consecutive years of Annualized Compensation at the time of termination, and who is vested at the time of termination, shall be determined as follows:
  - (i) For acquisitions that have payroll records setting forth Compensation as defined herein, such Employee's compensation earned during employment with the acquisition shall be used to the extent such payroll records exist. If such an Employee has less than three years of employment with the acquisition, the amount of Annualized Compensation so determined shall be multiplied by a factor of .925.
  - (ii) Effective January 1, 2002, for acquisitions and for mergers of other defined benefit plans into the Plan which do not have payroll records setting forth Compensation as defined herein, such Employee's highest base salary for any Plan Year (determined at the end of such Plan Year) during employment with the Company plus the target performance award, if any, for such Plan Year times a factor of .925.

8. **"Average Offset Compensation" ("ASSB-3")** shall mean the annual average of the lesser of:

- (a) the Social Security Taxable Wage Base for each Plan Year; or
- (b) an Employee's Annualized Compensation for each Plan Year,

when compared on an individual calendar year basis for the last full three calendar years before termination of employment (partial years shall be disregarded).

<u>Age at Commencement</u>	<u>Benefit Conversion</u>	<u>Age at Commencement</u>	<u>Benefit Conversion</u>
36	12.8	60	10.1
37	12.7	61	9.9
38	12.6	62	9.8
39	12.5	63	9.6
40	12.4	64	9.4
41	12.3	≥ 65	9.2

For purposes of this Definition, "age at commencement" shall mean the age of the Participant on his birthday nearest to the date the benefits commence.

12. **"Board of Directors"** shall mean the Board of Directors of The Dow Chemical Company.
13. **"Break in Service"** shall mean the combination of events as set forth in Section 2.5.
14. **"Child" or "Children"** shall mean:
  - (a) the living natural or legally adopted child of a Participant; or
  - (b) the living natural or legally adopted child of the Spouse, and, if adopted, whose adoption was final on the date of the Participant's termination of employment with the Company, and which child of the Spouse is living in a family relationship in the household of such Participant on the date of death of such Participant.
15. **"Code"** shall mean the Internal Revenue Code of 1986, as amended.
16. **"Company"** shall mean The Dow Chemical Company and any other entity authorized to participate in the Plan that is included in the Controlled Group; provided that any such entity shall be included within the term "Company" only while a member of the Controlled Group. The following is a list, current as of April 1, 2009, of entities authorized to participate in the Plan:

Agrigenetics, Inc. d/b/a Mycogen Seeds ("Mycogen")  
 ANGUS Chemical Company  
 DCOMCO  
 Diamond Technology Partnership Company  
 Dorinco Reinsurance Company  
 Dow AgroSciences LLC  
 Dow AgroSciences International Ltd.  
 Dow Chemical International Ltd  
 Dow Hydrocarbons & Resources, Inc.  
 Dow Pipeline Company  
 Essex Chemical Corporation  
 FilmTec Corporation  
 Flexible Products Company

Hampshire Chemical Corp.  
The Collaborative Group, Ltd

As of April 1, 2009, Rohm and Haas Company is authorized to participate in the Plan.

"Controlled group" means, with respect to The Dow Chemical Company, a controlled group of corporations within the meaning of section 414(b) or section 414(c) of the Code, or an affiliated service group within the meaning of section 414(m) of the Code; and any other entity required to be aggregated with The Dow Chemical Company under section 414(o) of the Code.

17. **"Compensation"** shall mean the following:

- (a) All cash compensation paid to an Employee for services rendered to the Company, which includes all amounts deferred by an Employee through The Dow Chemical Company Employees' Savings Plan (the "401(k) Plan"), any salary reduction agreement maintained under Code section 132(f)(4) which may be adopted by the Company and any plan maintained under Code section 125 which includes any amounts not available to an Employee in cash in lieu of group health coverage because the Employee is unable to verify that he has other health coverage (an amount shall be treated as an amount under Code section 125 only if the Company does not request or collect information regarding the Employee's other health coverage as part of the enrollment process for the health plan) and excluding any cost-of-living bonuses, premium payments in excess of straight time payments for overtime or holidays, allowance payments, disability payments, pay in lieu of vacation, payments for shift differentials, severance payments, transition or bridging payments, retention awards, special achievement or recognition awards, signing bonuses, deferrals elected by the Employee under either The Dow Chemical Company Elective Deferral Plan or The Dow Chemical Company Elective Deferral Plan Effective for Deferrals after January 1, 2005 and such other items that may be designated under rules uniformly applicable to all Employees similarly situated.
- (b) The following shall also be deemed Compensation:
  - (i) compensation paid during short term military leave;
  - (ii) promotion awards;
  - (iii) special assignment compensation (f/k/a developmental compensation);
  - (iv) extended duty compensation;
  - (v) DowBrands management incentive;
  - (vi) DowBrands recognition awards;

18. **"Covered Compensation"** ("ASSB-YOB") shall mean the annual average of the contribution and benefit bases in effect under section 230 of the Social Security Act for each year in the 35-year averaging period ending with the year before the year in which the Employee attains Social Security Retirement Age. The determination of Covered Compensation for any year ending with or preceding the year in which an Employee attains Social Security Retirement Age shall be made by assuming that there is no increase in the contribution and benefit bases in effect under section 230 of the Social Security Act after the year the Employee terminates employment and before the Employee attains Social Security Retirement Age.
19. **"Credited Service"** shall mean:
  - (a) With respect to the DEPP Formula and Flat Rate Formula, service of an Employee which is taken into account for purposes of determining the amount of such Employee's benefit, as more particularly described in Section 2.2.
  - (b) With respect to the Personal Pension Account, service described in Sections 2.2(b), 2.2(c), 2.2(d) and 2.2(e).
  - (c) With respect to the Prior Plan Formula, service of an Employee which is taken into account for purposes of determining the amount of such Employee's Prior Plan Formula benefit.
20. **"Current Formula Benefit"** shall mean the current formula benefit described in Definition 2(a)(ii).
21. **"Delayed Retirement Benefit"** shall mean a benefit paid to a vested Participant who retires after his Normal Retirement Date, as more particularly described in Section 4.3.
22. **"Delayed Retirement Date"** shall mean the first day of the month immediately following the month during which a Participant ceases active service with the Company as a result of delayed retirement.
23. **"DEPP"** shall mean the DEPP component of the Plan. The DEPP applies to Employees who are not Post-2007 New Hires.
24. **"DEPP Formula"** shall mean a benefit accrued on or after July 1, 1995 calculated under Section 4.1(b).
25. **"Disability Retirement Benefit"** shall mean a benefit payable to a vested Participant who ceases active employment with the Company because of a Total Disability condition, as more particularly described in Section 4.4.
26. **"Domestic Partner"** shall mean one of the two people in a Domestic Partnership on the earlier of the date of (i) death; or (ii) the last day of the election period for electing optional forms of distribution.
27. **"Domestic Partnership"** shall mean two people claiming to be "domestic partners" who meet all of the requirements of paragraph (a), or all of the requirements of paragraph (b):

- (a) the Participant has been continuously covered under the Social Security Act since the later of 1951 or the Participant's 21<sup>st</sup> birthday;
- (b) the Participant's Compensation for the Plan Year preceding his date of termination of employment was equal to his Annualized Compensation for such year;
- (c) for each Plan Year before each year in paragraph (b), such Compensation shall be assumed to have changed in proportion to the national average wage determined by the Social Security Administration for a particular year. An estimate of such wage shall be made only for years for which a national wage has not been determined; and
- (d) the Participant shall be deemed to have received no remuneration for Social Security purposes after the December 31 coincident with or immediately preceding the date of termination of employment.

This estimate shall be based upon the Social Security Act in effect on the January 1 coincident with or immediately preceding termination of employment.

- 35. **"Flat Rate Formula"** shall mean a benefit accrued under Section 10.37 or 10.38.
- 36. **"Grandfathered Formula Benefit"** shall mean the grandfathered formula benefit described in Definition 2(a)(i).
- 37. **"Hour of Service"** shall mean each hour (counting each overtime hour as one hour) during a Plan Year for which an Employee is paid or entitled to:
  - (a) payment of Compensation for the performance of services for the Company;
  - (b) payment, directly or indirectly, by the Company for a period during which the Employee performs no duties (such as vacation, jury duty or sick leave) including those hours for which payment is made or due under applicable workers' compensation laws (excluding, however, those hours for which payment is made or due under a plan maintained solely for the purpose of complying with applicable unemployment compensation, or disability insurance laws, or for payments made solely to reimburse an Employee for medical care or medically related expenses); or
  - (c) back pay, irrespective of whether mitigation of damages is either awarded or agreed to by the Company, without duplication of hours provided under either (a) or (b) above.

The Company shall determine and credit Hours of Service to the Employee for the Plan Year in which the hour occurred in a manner consistent with Department of Labor Regulations section 2530.200b-2(b) and (c), including section 2530.200b-2(c)(4). The Company may establish rules for crediting Hours of Service in addition to the foregoing minimum creditable hours for the purpose of recognizing sick leave or other periods described in the Plan.



## **Section 4.1: Normal Retirement Benefit**

**ARTICLE IV**  
**AMOUNT OF BENEFITS**

**Section 4.1 Normal Retirement Benefit**

- (a) This Section shall not apply to a Participant's Personal Pension Account.
- (b) The annual amount of the Normal Retirement Benefit payable to a vested Participant eligible under Section 3.1 in the form of a Life Only Annuity shall be equal to the greater of (i) and (ii) below, where:
  - (i) is the Grandfathered Formula Benefit calculated as follows:
    - (A) 1.6% of the Employee's Average Annual Compensation (not in excess of such Employee's Average Annual Compensation as of December 31, 2005) multiplied by the Employee's years of Credited Service not in excess of the lesser of (i) 35 years; or (ii) such Employee's Credited Service as of December 31, 2005, plus .8% of the Employee's Average Annual Compensation (not in excess of such Employee's Average Annual Compensation as of December 31, 2005) multiplied by the Employee's years of Credited Service, if any, in excess of 35 years, such excess is limited to that determined based on such Employee's Credited Service as of December 31, 2005; minus
    - (B) the basic offset factor (as defined below) times the Employee's Average Offset Compensation determined as of the earlier of (i) the Employee's date of termination; or (ii) December 31, 2005 multiplied by the Employee's years of Credited Service not in excess of the lesser of (i) 35 years; or (ii) such Employee's Credited Service as of December 31, 2005 multiplied by the applicable Social Security Reduction Factor multiplied by the ratio of the lesser of \$30,000 or the Employee's Average Annual Compensation (not in excess of such Employee's Average Annual Compensation as of December 31, 2005) to \$30,000.

The "basic offset factor," calculated under the method specified in the Tax Reform Act of 1986, is determined by the ratio of the Employee's Average Offset Compensation determined as of the earlier of (i) the Employee's date of termination; or (ii) December 31, 2005 to such Employee's Covered Compensation determined as of the earlier of (i) the Employee's date of termination; or (ii) December 31, 2005 according to the following schedule:

<u>Ratio</u>	<u>Basic Offset Factor</u>
Less than 1.0000	.0075
1.0000 to 1.2500	.0069
1.2501 to 1.5000	.0060

<u>Ratio</u>	<u>Basic Offset Factor</u>
1.5001 to 1.7500	.0053
1.7501 to 2.0000	.0047
2.0001 or more	.0042

Provided, however, that the amount calculated under this clause (B) shall be limited to 50% of the amount calculated under clause (A) above.

The Grandfathered Formula Benefit is deemed to be zero for Employees who first become Participants on or after January 1, 1996;

or

(ii) is the Current Formula Benefit calculated as follows:

- (A) the total Basic Annual Accruals earned for each year of Credited Service times the Employee's Average Annual Compensation, subject to the Minimum Transition Annual Accruals, if applicable, for each year of Credited Service after attainment of age 45; plus
- (B) the total Supplemental Annual Accruals earned for each year of Credited Service times the Employee's Average Annual Compensation in excess of the annual average Social Security Taxable Wage Base for the 36- month period before termination; divided by
- (C) the Benefit Conversion Factor.

- (c) The Normal Retirement Benefit of an Employee who was a Participant in this Plan on December 31, 1995 shall not be less than such Employee's Accrued Benefit on such date based on the terms of the Plan as then in effect and the Employee's Average Annual Compensation and Credited Service on December 31, 1995.
- (d) In no event shall the Normal Retirement Benefit of a Participant be less than the benefit to which the Participant would have been entitled if the Participant had retired on any January 1 preceding his actual retirement date, assuming such Participant's eligibility then to retire.

#### ***Section 4.2 Early Retirement Benefit***

- (a) This Section shall not apply to a Participant's Personal Pension Account.
- (b) The annual amount of the Early Retirement Benefit payable to a vested Participant eligible under Section 3.2 in the form of a Life Only Annuity shall be equal to the greater of (i) and (ii), where:
  - (i) is the Grandfathered Formula Benefit which is equal to the Employee's Normal Retirement Benefit determined under Section 4.1(b)(i) above with the amount

## **Section 4.10: Duplication of Benefits**

- (ii) No further minimum benefit accruals shall be provided under (i) above once the total accruals on behalf of the Employee attributable to contributions of the Company shall provide a benefit expressed as a Life Only Annuity commencing at Normal Retirement Age that equals or exceeds 20% of the Employee's highest average compensation for the five consecutive years during which his compensation was the highest.

For purposes of satisfying the minimum benefit requirements hereunder, in determining years of service with the Company, any service with the Company shall be disregarded to the extent that such service occurs during a Plan Year when the Plan benefits (within the meaning of Code section 410(b)) no Key Employee or former Key Employee.

- (f) *Minimum Vesting* - If an Employee is covered by the Plan during any Plan Year the Plan is deemed to be Top Heavy, the vesting requirements under Section 2.3 shall apply.

#### ***Section 4.9 Benefit Restrictions Upon Termination of Plan***

In the event of termination of the Plan, the benefit of any highly compensated employee, as defined in Code section 414(q), is limited to a benefit that is nondiscriminatory under Code section 401(a)(4). Benefits distributed to any of the 25 most highly compensated active and former highly compensated employees are restricted such that the annual payments are no greater than an amount equal to the payment that would be made on behalf of the Employee under a Life Only Annuity that is the Actuarial Equivalent of the sum of the Employee's Accrued Benefit and the Participant's other benefits under the Plan.

The preceding paragraph shall not apply if:

- (a) after payment of the benefit to an Employee described in the preceding paragraph, the value of Plan assets equals or exceeds 110% of the value of current liabilities, as defined in Code section 412(l)(7); or
- (b) the value of the benefits for an Employee described above is less than 1% of the value of current liabilities.

For purposes of this Section, "benefit" includes loans in excess of the amount set forth in Code section 72(p)(2)(A), any periodic income, any withdrawal values payable to a living Employee and any death benefits not provided for by insurance on the Employee's life.

#### ***Section 4.10 Duplication of Benefits***

There shall be no duplication of benefits payable under this Plan and under any other private qualified retirement plan to which the Company or any Subsidiary or affiliated corporation contributes or has contributed except the 401(k) Plan. If a Participant, Spouse or other Beneficiary, if any, shall be eligible for a benefit under any such plan other than those excepted in the preceding sentence and shall also be eligible for a benefit hereunder based upon the same period of service by the Participant, then the amount of such other benefit received (or the

Actuarial Equivalent thereof where necessary or appropriate) shall be deducted from the benefit payable hereunder for such same period of service.

***Section 4.11 Profit Sharing Account Minimum Benefit***

Notwithstanding any provision of the Plan to the contrary, after all obligations under the Plan to make retirement benefit payments to a vested Participant and survivor benefit payments to the Spouse or to make survivor benefit payments to the Spouse of a deceased Participant has been fulfilled and after deducting the amount of all such benefit payments from the deceased Participant's Profit Sharing Account, any remaining balance shall be paid as a Lump Sum Benefit to the Beneficiary on file with the Plan Administrator of such deceased Participant, or, if none, in the following order:

- (a) to the Spouse of such person, if any;
- (b) to the Child(ren) of such person, if any;
- (c) to the beneficiary of the Company Paid Life Insurance of such person, if any;
- (d) to the beneficiary of the Executive Split Dollar Life Insurance of such person, if any;
- (e) to the beneficiary of any Company-sponsored life insurance policy for which the Company pays all or part of the premium of such person, if any; or
- (f) to the deceased person's estate,

regardless of whether death occurs before or after retirement. If the deceased Participant is Married at the time of death, then such person's Beneficiary shall be his Spouse, unless the Spouse consents in writing to another specific named Beneficiary. This written spousal consent shall be witnessed by a notary public.

***Section 4.12 Funding-Based Limits on Benefits, Benefit Accruals, and Plan Amendments***

Effective for Plan Years beginning on or after January 1, 2008, and notwithstanding any other provision of the Plan, no benefit shall accrue or be paid under the Plan, and no amendment increasing liability for benefits shall take effect, to the extent that such accrual, payment, or amendment would exceed the funding-based limits in ERISA section 206(g) or Code section 436. Neither the Company nor any of its affiliates shall be required to make additional contributions or provide additional security to the Plan, and the method or timing of any actuarial valuation is not required to be altered, in order to avoid the application of such funding-based limits. To the extent required by section 1.436-1(d) of the Treasury Regulations, the Plan shall permit a Participant, Beneficiary, or alternate payee whose benefit payments are restricted pursuant to this Section 4.12 to make the elections provided under section 1.436-1(d) of the Treasury Regulations. Except to the extent required by law, the Plan shall not restore any benefits that did not accrue, and shall not make any payment in lieu of any benefits that are not paid, by reason of this Section 4.12, and any amendment that does not take effect by reason of

## **Section 7.1: Duties and Powers of Plan Administrators**

## **ARTICLE VII**

### **ADMINISTRATION AND FINANCING OF THE PLAN**

#### ***Section 7.1 Duties and Powers of Plan Administrators***

Each Plan Administrator shall be a "named fiduciary" within the meaning of section 402(a)(2) of ERISA with respect to, and shall have the exclusive power and authority to control and manage, the operation and administration of the Plan. The principal duty of such Plan Administrator shall be to see that the Plan is carried out in accordance with its terms and for the exclusive benefit of Participants and their Spouses and Beneficiaries.

Except as provided in Section 7.10, the responsibility and authority of the Vice President of Compensation and Benefits, the Global Director of Benefits and the U.S. Pension Plan Leader, each acting individually, shall include, but shall not be limited to, the following duties and powers:

- (a) To promulgate and enforce such rules and regulations and prescribe the use of such forms as he shall deem necessary or appropriate for the proper and efficient administration of the Plan;
- (b) To interpret the Plan and to resolve any possible ambiguities, inconsistencies and omissions therein or therefrom;
- (c) To decide all questions of fact arising under the Plan;
- (d) To comply with all of the reporting and disclosure requirements of Part 1 of Subtitle B of Title I of ERISA and any other applicable reporting and disclosure requirements, including preparing and signing the Form 5500 for the Plan and participant communications;
- (e) To retain third party administrators, consultants, accountants, actuaries and other individuals or entities as he deems necessary or advisable to assist him in fulfilling his responsibilities under the Plan, consistent with The Dow Chemical Company's guidelines on hiring and retention of outside service providers; monitor the performance of such individuals and entities, decide whether to discontinue the services of such individuals and entities, and make payment to such individuals and entities in accordance with the terms of the Plan;
- (f) To settle or compromise any claim or dispute involving the Plan and enforce any release of a claim against the Plan or any covenant not to sue the Plan; and
- (g) To determine which expenses are reasonable expenses of administering the Plan.



## **Section 9.6: Transfers of Employees**

**Section 9.4 Facility of Payment**

If any person entitled to receive benefits hereunder shall be physically or mentally incapable of receiving or acknowledging receipt thereof, and no legal representative shall have been appointed for such person, the Plan Administrator may cause any benefit otherwise payable to be made to such one or more individuals as may be chosen by the Plan Administrator from the Beneficiaries designated by the Participant, the institution or other individual maintaining such person or the Spouse or other relatives by blood or marriage of such person, and any payment so made shall be a complete discharge of all liability under the Plan thereof.

**Section 9.5 Unclaimed Benefit Payments**

The Plan Administrator shall adopt procedures for administering unclaimed benefit payments which shall be applied consistently with respect to all similarly-situated Employees under the Plan. Notwithstanding the foregoing, no unclaimed benefit payment shall escheat to a state government.

**Section 9.6 Transfers of Employees**

(a) *Transfers of Employees – Employees Who Were Hired Before January 1, 2008 and Were Transferred Before January 1, 1996*

(i) *Persons Who Cease to be Employees Due to Transfers or Coverage Under Another Plan - No Transfer Policy in Effect*

Notwithstanding any provision of the Plan to the contrary, any Participant who ceases to be an Employee:

- (A) because of leaving the employ of the Company to enter the employ of a corporation not authorized to participate in the Plan;
- (B) as a result of being transferred to such a place or places as to lose status as an Employee; or
- (C) because of being covered under a pension or retirement plan maintained by the Company or any division, Subsidiary or affiliated corporation of the Company other than this Plan or the 401(k) Plan,

shall continue to be a Participant under the Plan and shall not be deemed to have terminated employment as long as the Participant remains continuously in the service of the Company or such other corporations as are approved by the Plan Administrator. The Participant's Credited Service and the accrued portion of his Normal Retirement Benefit under Section 4.1 shall neither be increased nor decreased during any such period of coverage. When such service terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan solely on the basis of the Participant's Compensation and Credited Service with the Company as an Employee, except that Vesting Service and Eligibility Service for purposes of

determining eligibility for benefits and for the purpose of determining any reduction factors applicable to the Participant's benefit shall be deemed to include and shall be increased by employment at such other divisions or approved corporations.

The above applies only to transfers that are made to entities that have not entered into a transfer policy agreement with the Company.

(ii) *Employees Who Enter the Plan or Return to Coverage Under the Plan – No Transfer Policy in Effect*

The Plan Administrator shall have the authority to grant Credited Service, Vesting Service and/or Eligibility Service to any person who is an Employee for all of such person's continuous service with the Company or other corporations, determined in the same or similar manner as such service in Sections 2.2, 2.3 and 2.4, which service, although technically not employment service under the Plan, is nevertheless determined by the Plan Administrator, under rules uniformly applicable to all persons similarly situated, to be the equivalent thereof and for which service retirement benefits may or may not be provided under any retirement plan of the Company or other corporations. To the extent this action has the effect of making an Employee eligible for more than one retirement benefit, the nonduplication of benefits provisions under Section 4.10 shall apply.

(iii) *Employees Receiving Foreign Social Security Benefits Greater or Less Than United States Social Security Benefits*

In the case of an Employee who is eligible to receive or receives Social Security retirement benefits or other statutory benefits such as severance pay under the laws of any foreign government, the retirement benefit otherwise payable under this Plan may be adjusted by the Plan Administrator under rules uniformly applicable to all persons similarly situated either by adding to such benefit (in the case of such Employee who was a United States citizen during the entire period of continuous service) the excess, if any, of (B) below over (A) below, or by subtracting from such benefit (in the case of such Employee, whether or not a United States citizen) the excess, if any, of (A) below over (B) below, as the case may be, where

- (A) equals the sum of (i) the Actuarial Equivalent of such foreign social security benefits and other statutory benefits; and (ii) the amount of United States Social Security Benefits which the Employee receives or is eligible to receive; and
- (B) equals the amount of United States Social Security Benefits which the Employee would have been eligible to receive had the period of continuous service with the Company or other corporations outside the United States been performed within the United States.

- (iv) *Employees Whose Average Annual Compensation Should be Adjusted for Compensation Received From Noncovered Employers – No Transfer Policy in Effect*

In the case of a person who is not an Employee at the time of death, retirement or the termination of participation in the Plan by reason of having transferred from time to time to one or more corporations not qualified to participate in this Plan, but whose service with the Company and such other approved corporations is determined by the Plan Administrator, under rules uniformly applicable to all persons similarly situated, to be the equivalent of Credited Service, the Plan Administrator may authorize the calculation of such person's Average Annual Compensation under either of the methods provided in Definition 7, or a similar method, adjusted to include compensation received during any period of continuous service with any such other approved corporations.

- (v) *Persons Who Cease to be Employees Due to Transfers or Coverage Under Another Plan - Transfer Policy in Effect*

Notwithstanding any provision of the Plan to the contrary, any Participant who ceases to be an Employee:

- (A) because of leaving the employ of the Company to enter the employ of a corporation not authorized to participate in the Plan;
- (B) as a result of being transferred to such a place or places as to lose status as an Employee; or
- (C) because of being covered under a pension or retirement plan maintained by the Company or any division, Subsidiary or affiliated corporation of the Company other than this Plan or the 401(k) Plan,

shall continue to be a Participant under the Plan and shall not be deemed to have terminated employment as long as the Participant remains continuously in the service of the Company or such other corporations as are approved by the Plan Administrator and have entered into a transfer policy agreement with the Company, such entities listed in Addendum 1 attached hereto. When such service terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan on the basis of the Participant's Compensation, Credited Service, Vesting Service and Eligibility Service aggregated to include compensation, credited service, vesting service and eligibility service (all as defined hereunder) earned at such other divisions or approved corporations multiplied by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other division or approved corporation.

The above applies only to transfers that are made to entities that have entered into a transfer policy agreement with the Company, such entities listed in Addendum 1

attached hereto, as may be amended from time to time. If an entity covered under Section 9.14 is listed in Addendum 1, the terms of this provision shall supersede the terms of Section 9.14

(vi) *Employees Who Enter the Plan or Return to Coverage Under the Plan – Transfer Policy in Effect*

Notwithstanding any provision of the Plan to the contrary, Employees who enter the Plan or return to coverage under the Plan from an entity that has entered into a transfer policy agreement with the Company, such entities are listed in Addendum 1 attached hereto, shall have their benefits calculated under this subparagraph (vi). Such Employee shall be entitled to benefits under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service earned under the terms of the Plan while an Employee aggregated to include compensation, credited service, vesting service and eligibility service (all as defined hereunder) earned at such other entity multiplied by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other approved entity.

The above applies only to transfers that are made from entities that have entered into a transfer policy agreement with the Company, such entities listed in Addendum 1 attached hereto, as may be amended from time to time. If an entity covered under Section 9.14 is listed in Addendum 1, the terms of this provision shall supersede the terms of Section 9.14.

(vii) *Employees Who Enter the Plan or Return to Coverage Under the Plan from an Entity that Transfers Assets Representing the Value of the Transferred Employees' Benefits*

Employees who enter the Plan or return to coverage under the Plan from an approved entity that transfers assets representing the value of the transferred Employees' benefits under a defined benefit plan maintained by the transferring entity shall have their benefits calculated under this subparagraph (vii). Such an Employee shall be entitled to benefits under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service earned under the terms of the Plan while an Employee aggregated to include compensation, credited service, vesting service and eligibility service (as defined under the transferring plan) earned at such other entity.

(viii) *The following are transition Employees who transferred on or before January 1, 1996, but are treated in accordance with the transfer provisions of paragraph (b) below:*

Abrassart, Dean G	Baker, Daryl R	Baker, Gary E
Bayduk, David J	Bruno, John	Byrne, J. Gerald
Cavanagh, James M	Cikalo, John P	Cosman, Eric C
Darby, Nicholas	DeGenova, Richardo	Devon, Michael J

Dickinson, Russell F	Docking, Darrel E	Dutot, Michael J
Ertle, Christian M	Erwin, Daniel G	Farnell, William R
Farney, Robert A	Fedoruk, Allan R	Franklin, Allan J
Goring, Douglas B	Grinshpun, Anna	Hettyey de Makkoshi, Hans
Hrynyk, Thomas	Huisman, Jan	Ireland, Paul H
Johnson, Ronald D	King, Michael J	Kolthammer, Brian W
Lara, Rogelio A	Lord, Murray G	Low, Douglas W
Lucas, Carl E	McKay, Allan S	Mock, Gordon K
Nadane, Dennis A	Noguez Cabrera, Miguel A	Oman, Julie N
Oswald, Thomas	Holding, Darcy	Kurtas, Stanley M
Pollock, Alexander	Radek, Henry S	Ravenscroft, Nigel
Robson, Ian A	Snoddy, Douglas W	Urso, Michael S
	Watt, Stewart	Wellington, James B
Worthington, Brian	Tough, David	

(b) *Transfers of Employees – Employees Who Were Hired Before January 1, 2008 and Were Transferred On or After January 1, 1996*

(i) *Transfers to/from Entities Related to the Company Set Forth in Addendum 1 ("Proration Method")*

(A) *Persons Who Cease to be Employees Due to Transfers or Coverage Under Another Plan*

Notwithstanding any provision of the Plan to the contrary, any Participant who ceases to be an Employee:

- (1) because of leaving the employ of the Company to enter the employ of a corporation not authorized to participate in the Plan;
- (2) as a result of being transferred to such a place or places as to lose status as an Employee; or
- (3) because of being covered under a pension or retirement plan maintained by the Company or any division, Subsidiary or affiliated corporation of the Company other than this Plan or the 401(k) Plan,

shall continue to be a Participant under the Plan and shall not be deemed to have terminated employment as long as the Participant remains continuously in the service of the Company or such other corporations as are approved by the Plan Administrator. When such service terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan on the basis of the Participant's Compensation, Credited Service, Vesting Service and Eligibility Service aggregated to include compensation, credited service, vesting service and eligibility service (all

as defined hereunder) earned at such other divisions or approved corporations multiplied by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other division or approved corporation. For purposes of determining Compensation while at such other corporation, the Company shall use the comparable job level and pay position in the relevant Company pay structure.

(B) *Employees Who Enter the Plan or Return to Coverage Under the Plan*

Notwithstanding any provision of the Plan to the contrary, Employees who enter the Plan or return to coverage under the Plan from an entity related to the Company listed in Addendum 1 attached hereto shall have their benefits calculated under this clause (B). Such Employee shall be entitled to benefits under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service earned under the terms of the Plan while an Employee aggregated to include compensation, credited service, vesting service and eligibility service (all as defined hereunder) earned at such other entity related to the Company multiplied by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other entity related to the Company.

The above applies only to transfers that are made from entities related to the Company listed in Addendum 1 attached hereto, as may be amended from time to time. If an entity covered under Section 9.14 is listed in Addendum 1, the terms of this provision shall supersede the terms of Section 9.14.

(ii) *Transfers to/from Entities Related to the Company Not Listed in Addendum 1*

(A) *Persons Who Cease to be Employees Due to Transfers to an Entity Related to the Company that does not Maintain a Defined Benefit Plan*

Notwithstanding any other provision of the Plan to the contrary, and subject to Section 9.14, any Participant who ceases to be an Employee:

- (1) because of leaving the employ of the Company to enter the employ of a corporation not authorized to participate in the Plan and such corporation does not maintain a defined benefit plan;
- (2) as a result of being transferred to such a place or places as to lose status as an Employee; or

- (3) because of being covered under a defined contribution pension or retirement plan maintained by the Company or any division, Subsidiary or affiliated corporation of the Company other than the 401(k) Plan,

shall continue to be a Participant under the Plan and shall not be deemed to have terminated employment as long as the Participant remains continuously in the service of the Company or such other corporations as are approved by the Plan Administrator. The Participant's Credited Service and the accrued portion of Normal Retirement Benefit under Section 4.1 shall neither be increased nor decreased during any such period of coverage. When such service terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan solely on the basis of Compensation and Credited Service with the Company as an Employee, except that Vesting Service and Eligibility Service for purposes of determining eligibility for benefits and for the purpose of determining any reduction factors applicable to the Participant's benefit shall be deemed to include and shall be increased by employment at such other divisions or approved corporations.

(B) *Persons Who Cease to be Employees Due to Transfers or Coverage Under Another Defined Benefit Plan*

Notwithstanding any provision of the Plan to the contrary, any Participant who ceases to be an Employee:

- (1) because of leaving the employ of the Company to enter the employ of a corporation not authorized to participate in the Plan and such corporation maintains a defined benefit plan;
- (2) as a result of being transferred to such a place or places as to lose status as an Employee; or
- (3) because of being covered under a defined benefit pension or retirement plan maintained by the Company or any division, Subsidiary or affiliated corporation of the Company other than this Plan, shall continue to be a Participant under the Plan and shall not be deemed to have terminated employment as long as the Participant remains continuously in the service of the Company or such other corporations as are approved by the Plan Administrator. When such service terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service aggregated to include compensation, credited service, vesting service and eligibility service (all as defined hereunder) earned at such other divisions or approved corporations multiplied



by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other division or approved corporation. For purposes of determining Compensation while at such other corporation, the Company shall use the comparable job level and pay position in the relevant Company pay structure.

Notwithstanding the foregoing, this Section 9.6(b)(ii)(B) shall not apply to the benefits of Participants who are transferred to the Union Carbide Corporation in accordance with Section 9.6(d).

(C) *Employees Who Enter the Plan or Return to Coverage Under the Plan from an Entity Related to the Company that Maintains a Defined Benefit Plan*

Notwithstanding any provision of the Plan to the contrary, Employees who enter the Plan or return to coverage under the Plan from an entity related to the Company that maintains a defined benefit plan shall have their benefits calculated under this clause (C). Such Employee shall be entitled to benefits under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service earned under the terms of the Plan while an Employee aggregated to include compensation, credited service, vesting service and eligibility service (all as defined hereunder) earned at such other entity related to the Company multiplied by a fraction, the numerator of which is the Credited Service with the Company and the denominator of which is the Credited Service with the Company plus the credited service (as defined hereunder) with such other entity related to the Company.

(D) *Employees Who Enter the Plan or Return to Coverage Under the Plan from an Entity Related to the Company That Maintains Only a Defined Contribution Plan*

Notwithstanding any provision of the Plan to the contrary, Employees who enter the Plan or return to coverage under the Plan from an entity related to the Company that maintains only a defined contribution plan shall have their benefits calculated under this clause (D). In the case of such an Employee who terminates for any reason, including death or retirement, the Participant, Spouse, Beneficiary or estate shall be entitled to the benefits payable under the Plan solely on the basis of Compensation and Credited Service with the Company as an Employee, except that Vesting Service and Eligibility Service for purposes of determining eligibility for benefits and for the purpose of determining any reduction factors applicable to the Participant's benefit shall be deemed to include and shall be increased by employment at such other entity related to the Company. Such transferred Employees are not eligible for Minimum Transition

Annual Accruals unless such Employees were Participants in this Plan on January 1, 1996.

(iii) *Employees Receiving Foreign Social Security Benefits Greater or Less Than United States Social Security Benefits*

In the case of an Employee who is eligible to receive or receives Social Security retirement benefits or other statutory benefits such as severance pay under the laws of any foreign government, the retirement benefit otherwise payable under this Plan may be adjusted by the Plan Administrator under rules uniformly applicable to all persons similarly situated either by adding to such benefit (in the case of such Employee who was a United States citizen during the entire period of continuous service) the excess, if any, of (B) below over (A) below, or by subtracting from such benefit (in the case of such an Employee, whether or not a United States citizen) the excess, if any, of (A) below over (B) below, as the case may be, where

- (A) equals the sum of (i) the Actuarial Equivalent of such foreign social security benefits and other statutory benefits; and (ii) the amount of United States Social Security Benefits which the Employee receives or is eligible to receive; and
- (B) equals the amount of United States Social Security Benefits which the Employee would have been eligible to receive had the period of continuous service with the Company or other corporations outside the United States been performed within the United States.

(iv) *Employees Who Enter the Plan or Return to Coverage Under the Plan from an Entity Related to the Company that Transfers Assets Representing the Value of the Transferred Employees' Benefits*

Employees who enter the Plan or return to coverage under the Plan from an entity related to the Company that transfers assets representing the value of the transferred Employees' benefits under a defined benefit plan maintained by the transferring entity shall have their benefits calculated under this subparagraph (iv). Such an Employee shall be entitled to benefits under the Plan on the basis of Compensation, Credited Service, Vesting Service and Eligibility Service earned under the terms of the Plan while an Employee aggregated to include compensation, credited service, vesting service and eligibility service (as defined under the transferring plan) earned at such other entity related to the Company.

(c) *Transfers of Employees Post-2007 New Hires*

(i) *Transfers From Entities Related To The Company*

- (A) Except as otherwise provided in Article ARTICLE X and this paragraph (c), with respect to an individual who (i) is employed by an entity related to the Company; and (ii) immediately transfers to,

or is hired by, the Company, the Plan shall recognize such individual's original hire date with such entity if it is 80% or more owned (directly or indirectly) by the Company on the date the individual transfers to, or is hired by, the Company.

- (1) If the hire date recognized by the Plan is before January 1, 2008, the individual shall be subject to the DEPP upon transfer to, or hire by, the Company.
- (2) If the hire date recognized by the Plan is on or after January 1, 2008, the individual shall be subject to the PPA upon transfer to, or hire by, the Company.

- (B) Except as otherwise provided in Article ARTICLE X and this paragraph (c), the Plan shall not recognize an individual's original hire date with an entity that, as of the date the individual transfers to, or is hired by, the Company, is less than 80% owned (directly or indirectly) by the Company. In this instance, such individual's 'hire date' recognized by the Plan shall be the date the individual transfers to, or is hired by, the Company.

(ii) *Individuals With a Company Sponsored Permanent Relocation or Localization*

- (A) Except as otherwise provided in Article ARTICLE X, individuals with a 'Company sponsored permanent relocation or localization' whose original hire date recognized by the transferring entity is before January 1, 2008 shall be subject to the DEPP upon transfer to the United States.
- (B) Except as otherwise provided in Article ARTICLE X, individuals with a 'Company sponsored permanent relocation or localization' whose original hire date recognized by the transferring entity is on or after January 1, 2008 shall be subject to the PPA upon transfer to the United States.
- (C) For purposes of this subparagraph (ii), a 'Company sponsored permanent relocation or localization' occurs when (i) an individual terminates his labor contract (if applicable) with an entity related to the Company in his current home country at the request of the Company and immediately becomes an Employee; (ii) such individual receives 'full international relocation support' (as defined in subparagraph (iv) below) in connection with the relocation to the United States; and (iii) the relocation or localization is between entities that are partially owned (directly or indirectly) by the Company. A 'Company sponsored permanent relocation or localization' also occurs when the Spouse of an Employee with a Company sponsored permanent relocation or

localization terminates her labor contract (if applicable) with an entity related to the Company in her current home country at the request of the Company and immediately becomes an Employee.

(iii) *Individuals With An Employee Initiated Move*

- (A) Individuals who incurred an 'Employee initiated move' to the United States before January 1, 2008 shall be subject to the DEPP.
- (B) Individuals who incur an 'Employee initiated move' to the United States on or after January 1, 2008 shall be subject to the PPA and shall be treated as new hires for all Plan purposes.
- (C) For purposes of this subparagraph (iii), an 'Employee initiated move' occurs when an individual terminates his employment with an entity related to the Company in one country and is immediately hired as an Employee without 'full international relocation support' (as defined in subparagraph (iv) below).

(iv) *Full International Relocation Support*

For purposes of this paragraph (c), 'full international relocation support' means assistance provided under the applicable Inter-area or Intra-area assignment policy then in effect for long-term transfers (that subsequently become localizations) or permanent relocations which is established by an entity related to the Company.

(d) *Transfers to the Union Carbide Corporation*

Participants in this Plan who were or are transferred to the Union Carbide Corporation ('UCC') after UCC was acquired by the Company shall have the assets attributable to their benefits under this Plan, that have not been secured by an annuity contract, transferred to the Union Carbide Employees' Pension Plan (the 'UCC Plan'). Such asset transfer shall occur on an annual basis and be calculated pursuant to Code section 414(l). The benefits under this Plan attributable to the amount of assets scheduled to be transferred in the annual transfer shall be paid by the UCC Plan. This Plan shall have no liability regarding the benefits attributable to the amount of assets scheduled to be transferred in the annual transfer. Notwithstanding the foregoing, any benefit secured by an annuity contract shall be paid by this Plan.

**Section 10.46: Transfers from DuPont Dow Elastomers  
Pension and Retirement Plan**

sum of such Participant's age and years of Vesting Service equals at least 90 shall be entitled to receive a monthly Early Retirement Supplement, beginning with the month following Retirement and ending with the payment for the month in which such Retired Participant dies or attains age 62, whichever occurs first. Such Early Retirement Supplement shall be in an amount equal to the lesser of \$150 per month or the amount by which \$1,250 per month exceeds such retired Participant's Early Retirement Benefit.

(iv) *Transferred Employees*

Before the merger of the DASPP into this Plan, Participants who transferred between this Plan and the DASPP were subject to proration under Section 9.6(b)(i) of this Plan and as was set forth in the DASPP. In order to calculate the benefits of such Participants, the following provisions shall apply:

- (A) Minimum Transition Annual Accruals shall be determined using a phase-in percentage of the Minimum Transition Annual Accruals under Definition 45 of this Plan and the Minimum Transition Annual Accruals under paragraph (a)(i) above. Such phase-in percentage of each Minimum Transition Annual Accrual shall be determined and fixed on December 31, 2005. The Minimum Transition Annual Accruals phase-in percentage set forth in Definition 45 of this Plan shall be multiplied by the percentage determined by dividing Credited Service under this Plan by such Credited Service aggregated with credited service under the DASPP, all such service limited to December 31, 2005 and added to the Minimum Transition Annual Accruals phase-in percentage under paragraph (a)(i) above multiplied by the percentage determined by dividing credited service under DASPP by such credited service aggregated with Credited Service under this Plan, all such service limited to December 31, 2005.
- (B) Transfers between the Company and Dow AgroSciences LLC on and after January 1, 2006 shall not impact the calculation of benefits under this Section or Section 9.6(b)(i). Benefits for Participants that were transferred between the Company and Dow AgroSciences LLC before January 1, 2006 shall be determined as if the entity that employs them on December 31, 2005 shall employ them until termination of employment from the Company or Dow AgroSciences LLC.

***Section 10.46 Transfers from DuPont Dow Elastomers Pension and Retirement Plan***

Effective July 1, 2005, DuPont Dow Elastomers, L.L.C. (DDE) ceased to exist as a joint venture of The Dow Chemical Company and E.I. Du Pont DeNemours and Company (DuPont) ("Event"). Before this Event, transferred Employees were treated in accordance with Section 9.6(a)(vi). Upon and after this Event, former employees of DDE were transferred to the Company. Such former employees can be categorized as follows:

- Employees who were first hired by DDE;

- Former employees who were transferred to DDE from DuPont;
- Former employees who were transferred to DDE from the Company.

The purpose of this Section is to set forth the provisions regarding the retirement benefits to be provided to such transferred former employees. Average Annual Compensation for Employees covered under this Section who, since the date of the Event, have less than three years of Annualized Compensation at the time of termination and who are vested at the time of termination shall be such Employee's highest base salary for any Plan Year, determined at the end of such Plan Year, during employment with the Company plus the target performance award, if any, for such Plan Year times a factor of .925.

(a) *Employees Who Were First Hired by DDE*

Employees first hired by DDE on or after the formation date of DDE (on or about January 1, 1996) and transferred to the Company shall be granted Vesting Service, Eligibility Service and Credited Service equal to the corresponding service earned under the DuPont Dow Elastomers Pension and Retirement Plan. Provided, however, that any benefit earned under the Plan shall be reduced by any benefit, subject to reduction for early commencement as set forth below, that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan. Benefits from the DuPont Dow Elastomers Pension and Retirement Plan shall be reduced as follows: 5% per year from age 65 to age 50 and Actuarial Equivalence from age 50 to age at commencement. Such Employees are not eligible for Minimum Transition Annual Accruals or the Grandfathered Formula Benefit.

(b) *Former Employees Who Were Transferred to DDE from DuPont*

(i) *Part of Asset Transfer July 1, 1997*

Former employees transferred to DDE from DuPont, as part of the asset transfer July 1, 1997 to the DuPont Dow Elastomers Pension and Retirement Plan, who are transferred to the Company shall be granted Vesting Service, Eligibility Service and Credited Service equal to the corresponding service earned under the DuPont Dow Elastomers Pension and Retirement Plan. Provided, however, that any benefit earned under the Plan shall be reduced by any benefit, subject to reduction for early commencement as set forth below, that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan. Benefits from the DuPont Dow Elastomers Pension and Retirement Plan shall be reduced as follows: 5% per year from age 65 to age 50 and Actuarial Equivalence from age 50 to age at commencement. Such Employees are eligible for Minimum Transition Annual Accruals.

(ii) *Retired as of Date of Event*

Former employees transferred to DDE from DuPont who were retired as of the date of the Event referenced above shall receive a benefit hereunder based on their date of hire at DDE. Provided, however, that any benefit payable under the

Plan shall be reduced by any benefit, subject to reduction for early commencement as set forth below, that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan. Benefits from the DuPont Dow Elastomers Pension and Retirement Plan shall be reduced as follows: 5% per year from age 65 to age 50 and Actuarial Equivalence from age 50 to age at commencement.

(c) *Former Employees Who Were Transferred to DDE from the Company*

(i) *Part of Asset Transfer July 1, 1997*

Former employees transferred to DDE from the Company, as part of the asset transfer July 1, 1997 to the DuPont Dow Elastomers Pension and Retirement Plan, who are transferred back to the Company shall be granted Vesting Service, Eligibility Service and Credited Service equal to the corresponding service earned under the Plan before such transfer plus the service earned under the DuPont Dow Elastomers Pension and Retirement Plan. Provided, however, that any benefit earned under the Plan shall be reduced by any benefit, subject to reduction for early commencement as set forth below, that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan. Benefits from the DuPont Dow Elastomers Pension and Retirement Plan shall be reduced as follows: 5% per year from age 65 to age 50 and Actuarial Equivalence from age 50 to age at commencement. Such Employees are eligible for Minimum Transition Annual Accruals and the Grandfathered Formula Benefit.

(ii) *Transferred Post July 1, 1997*

Former employees transferred to DDE from the Company after July 1, 1997 who are transferred back to the Company shall be granted Vesting Service, Eligibility Service and Credited Service equal to the corresponding service earned under the Plan before such transfer plus the service earned under the DuPont Dow Elastomers Pension and Retirement Plan. Provided, however, that any benefit earned under the Plan shall be reduced by any benefit that may have been earned under the DuPont Dow Elastomers Pension and Retirement Plan prorated based on service to date of event and under Section 9.6(a)(vi). Such Employees are eligible for Minimum Transition Annual Accruals and the Grandfathered Formula Benefit. Any such Employee who was a former employee of the Union Carbide Corporation shall also be subject to the provisions of Section 10.32.

***Section 10.47 Poly-Carb Inc.***

Employees of Poly-Carb Inc. who were actively employed by Poly-Carb on January 1, 2008 or thereafter are eligible to participate in the Plan under the terms and conditions of the Plan applicable to Employees hired on or after January 1, 2008. Service with Poly-Carb before January 1, 2008 shall be recognized by the Plan as Vesting Service and Eligibility Service under the Plan. Service with Poly-Carb before January 1, 2008 shall not count as Credited Service. Credited Service begins on the later of January 1, 2008 or hire-date.